RESOLUTION 2022-89

RESOLUTION APPROVING THE SITE PLAN FOR LOT 1, HERITAGE HILL, WEST BRANCH, IOWA.

WHEREAS, BBCO, LLC and the City of West Branch ("BBCO"), are the owners of Lot 1, Heritage Hill, West Branch, Iowa (the "Property"); and

WHEREAS, the City and BBCO previously entered into a Development Agreement whereby the City would convey the City's portion of Lot 1 to BBCO; and

WHEREAS, BBCO has submitted a proposed Site Plan for the Property; and

WHEREAS, the Planning and Zoning Commission has reviewed said Site Plan and recommended approval of the same; and

WHEREAS, said Site Plan complies with the requirements of Chapter 167 of the Code of Ordinances of the City of West Branch.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of West Branch, Cedar County, Iowa, that the site plan of BBCO for Lot 1, Heritage Hill, West Branch, Iowa, is hereby approved, subject to implementing any changes recommended by the committee reviewing the site plan.

Passed and approved this 3rd day of October, 2022.

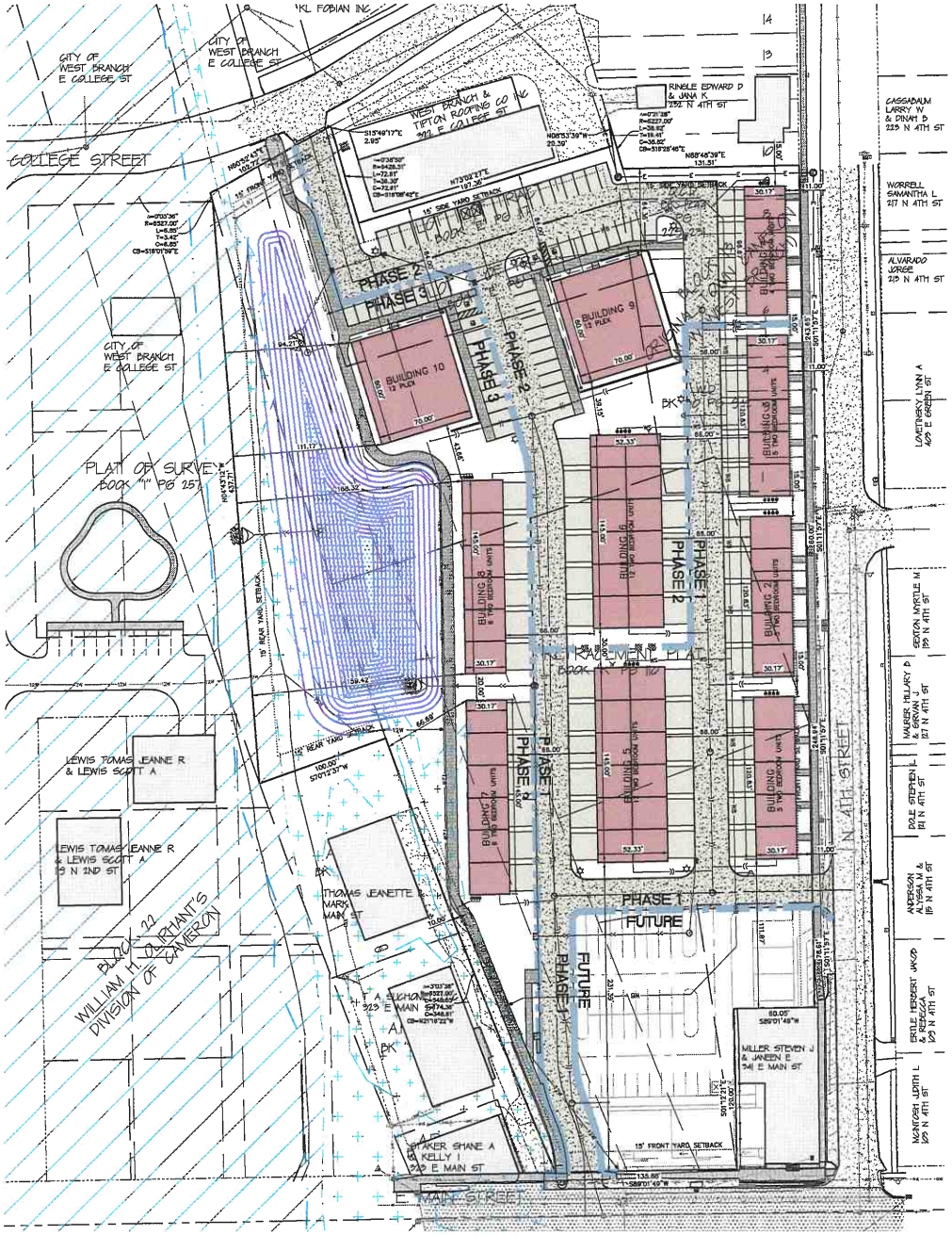
Roger Laughlin

Roger Laughlin, Mayor

ATTEST:

Leslie Brick

Leslie Brick, City Clerk



SITE PLAN
HERITAGE HILL - LOT 1
WEST BRANCH, IOWA

NORTH

GRAPHIC SCALE IN FEET 1"=40'

PLAT PREPARED BY:
MMS CONSULTANTS INC.
1917 S. GILBERT STREET
IOWA CITY, IA 52240

APPLICANT:
BIRCO LLC
PO BOX 277
WEST LIBERTY, IOWA 52776

APPLICANTS ATTORNEY:
JAMES D. HOUGHTON
216 STEVENS DRIVE
IOWA CITY, IA 52240

UTILITIES

THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL AT 811 OR 800/292-8989 NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

STANDARD LEGEND AND NOTES

- PROPERTY &/or BOUNDARY LINES
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- RIGHT-OF-WAY LINES
- EXISTING RIGHT-OF-WAY LINES
- CENTER LINES
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- LOT LINES, PLATTED OR BY DEED
- PROPOSED EASEMENT LINES
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- RECORDED DIMENSIONS
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THE ACTUAL SIZE AND LOCATION OF ALL PROPOSED FACILITIES SHALL BE VERIFIED WITH CONSTRUCTION DOCUMENTS, WHICH ARE TO BE PREPARED AND SUBMITTED SUBSEQUENT TO THE APPROVAL OF THIS DOCUMENT.

LOCATION MAP
NOT TO SCALE

FEMA NOTE:

1. A PORTION OF THIS SITE RESIDES WITHIN THE FEMA FLOODWAY AREA IN ZONE AE, THE ZONE AE 100-YEAR FLOOD ZONE (1.0% CHANCE), AND THE ZONE X (0.2% CHANCE) AS NOTED IN FEMA PANEL NUMBER 19031C0212C, EFFECTIVE DATE: 08/19/2013. SEE LEGEND BELOW.

- FLOODWAY AREA IN ZONE AE
- THE ZONE AE 100-YEAR FLOOD ZONE (1.0% CHANCE)
- THE ZONE X (0.2% CHANCE)

PAVING CONSTRUCTION NOTES

1. PAVEMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH I.D.O.T. SPECIFICATION SECTION 2301.
2. I.D.O.T. CLASS C-3 CONCRETE SHALL BE USED, UNLESS NOTED OTHERWISE.
3. PAVEMENT JOINTS SHALL CONFORM TO I.D.O.T. STANDARD ROAD PLAN PV-101.
4. SUBGRADE UNDER PROPOSED PAVEMENT SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY, TO A DEPTH OF SIX (6) INCHES, UNLESS NOTED OTHERWISE.
5. ALL SAWED PAVEMENT JOINTS SHALL BE SEALED.

PAVEMENT LEGEND	MATERIAL	TOTAL*
	7" PCC	5,175 SY
	6" PCC	3,618 SY
	4" PCC	1,573 SY

*TOTALS INCLUDE ALL SF OF MATERIAL, INCLUDING OUTSIDE OF PROPERTY LINE

100 YEAR FLOOD ELEVATION = 713.20

LEGAL:

HERITAGE HILL - LOT 1 IN WEST BRANCH, CEDAR COUNTY, IOWA, IN ACCORDANCE WITH THE RECORDED PLAT THEREOF, CONTAINING 5.93 ACRES AND SUBJECT TO EASEMENTS AND RESTRICTION OF RECORD.

SITE DEVELOPMENT SUMMARY:

ZONING: PUD
SQUARE FOOTAGE: 258,182 SF
PROPOSED USE: RESIDENTIAL

DEVELOPMENT CHARACTERISTICS:

HERITAGE HILL -LOT 1 ON GREEN STREET IS TO BE A 5.93 ACRE. THE PLAN WILL CONSIST OF 2 (TWO) PROPOSED RESIDENTIAL 12-PLEX BUILDINGS, AND FIFTY FIVE (55) PROPOSED RESIDENTIAL 2 (TWO) BEDROOM UNITS.

DEVELOPMENT SCHEDULE

APPLICANT PLANS TO BEGIN CONSTRUCTION ON FALL 2022, WITH AN ESTIMATED COMPLETION DATE IN FALL 2023.

SITE COVERAGES:

TOTAL LOT AREA	258,182 S.F. (100%)
PROPOSED BUILDING AREA	46,117 S.F. (17.9%)
PROPOSED PAVING AREA	86,800 S.F. (33.6%)
TOTAL IMPERVIOUS AREA	132,917 S.F. (51.5%)
TOTAL OPEN AREA	125,265 S.F. (48.5%)

LOT REQUIREMENTS:

FRONT YARD SETBACK	(N. 4TH ST) 13 FEET (E. MAIN ST) 13 FEET (E. COLLEGE ST) 15 FEET
SIDE YARD SETBACK	15 FEET
REAR YARD SETBACK	15 FEET

PARKING REQUIREMENTS:

2 SPACES PER UNIT/ 12 UNITS (TWO BEDROOM EACH) PER BUILDING/ 2 BUILDINGS
2*(12*12) = 48 SPACES
TOTAL PARKING PROVIDED = 60 SPACES
2 SPACES PER UNIT/ (TWO BEDROOM EACH) PER BUILDING/ 55 BUILDINGS
2*(55) = 110 SPACES
TOTAL PARKING PROVIDED = 220 SPACES (110 GARAGE SPACES AND 110 DRIVE SPACES

SITE LIGHTING SHALL BE PROVIDED ON THE SIDES OF THE BUILDING.

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C501	GENERAL NOTES AND DETAILS
L100	LANDSCAPE PLAN

LICENSED PROFESSIONAL ENGINEER KELLY J. BECKLER 14624 IOWA

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

KELLY J. BECKLER P.E. Iowa Lic. No. 14624 20____

My license renewal date is December 31, 20____

Pages or sheets covered by this seal: _____

SEAL

DRAFT

5.93 AC.

MMS
CIVIL ENGINEERS
LAND PLANNERS
LAND SURVEYORS
LANDSCAPE ARCHITECTS
ENVIRONMENTAL SPECIALISTS

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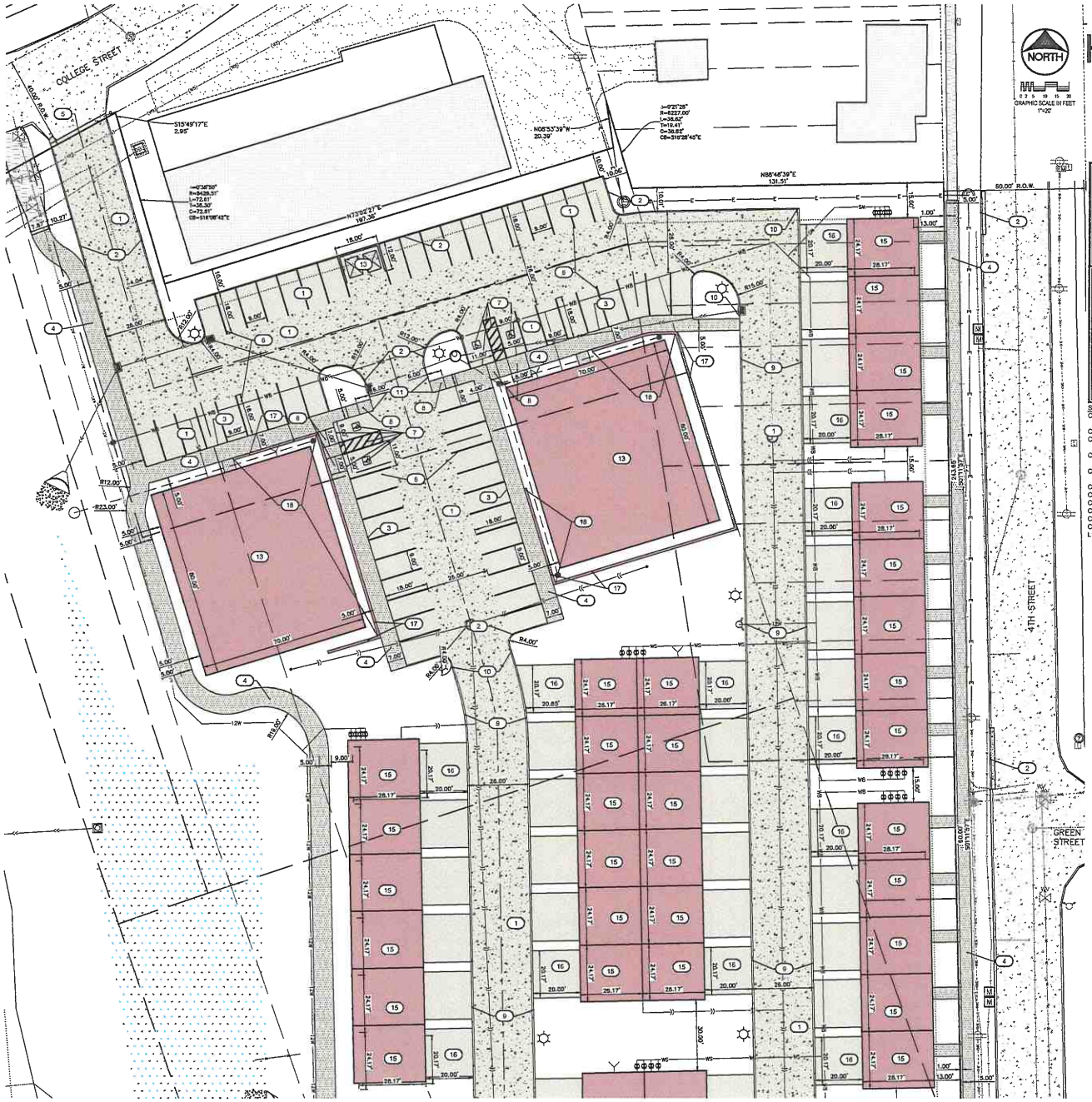
Date	Revision
6/24/22	INTERNAL REVIEW - KJC
8/01/22	INTERNAL REVIEW - KJC

OVERALL SITE LAYOUT AND DIMENSION PLAN

HERITAGE HILL, LOT 1
WEST BRANCH, CEDAR COUNTY, IOWA

MMS CONSULTANTS, INC.

Date:	08-04-22
Designed by: KJC	Field Book No: 1343, PG 39
Drawn by: TAV	Scale: 1"=40'
Checked by: KJB	Sheet No:
Project No: 11186-002	C120 of:



SITE PLAN
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IOWA 811 ONE CALL℠

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KEYNOTES

NUMBER	KEYNOTE	DETAIL
1	INSTALL DRIVE AND PARKING (SEE PAVING LEGEND TABLE THIS SHEET FOR THICKNESS AND MATERIAL)	
2	INSTALL STANDARD 6" CURB AND GUTTER	
3	INSTALL THICKENED EDGE SIDEWALK	
4	INSTALL 4" PCC SIDEWALK	
5	REMOVE EXISTING CURB AND GUTTER SECTION AND CONNECT TO EXISTING PCC PAVING W/ "37-8" JOINT	
6	INSTALL 4" WIDE PAVEMENT MARKINGS (TYP)	
7	HANDICAP PARKING STRIPING AND SIGNAGE PER DETAIL SHEET CU500	
8	INSTALL ADA RAMP	
9	INSTALL 3" ROLL CURB AND GUTTER	
10	TRANSITION TO 6" CURB	
11	TRANSITION CURB TO ZERO	
12	MATCH EXISTING CURB AND GUTTER	
13	INSTALL DUMPSTER ENCLOSURE	
14	RESIDENTIAL 12-PLEX (3 STORY) BUILDING 4 UNITS EACH FLOOR	
15	RESIDENTIAL 2 BEDROOM UNIT (3 STORY) WITH 2 STALL GARAGE AT MAIN LEVEL	
16	INSTALL DRIVEWAY (SEE PAVING LEGEND TABLE THIS SHEET FOR THICKNESS AND MATERIAL)	
17	INSTALL LANDSCAPE BLOCK RETAINING WALL (DESIGNED BY OTHERS)	
18	INSTALL ADA COMPLIANT SAFETY RAIL	

5.93 AC.

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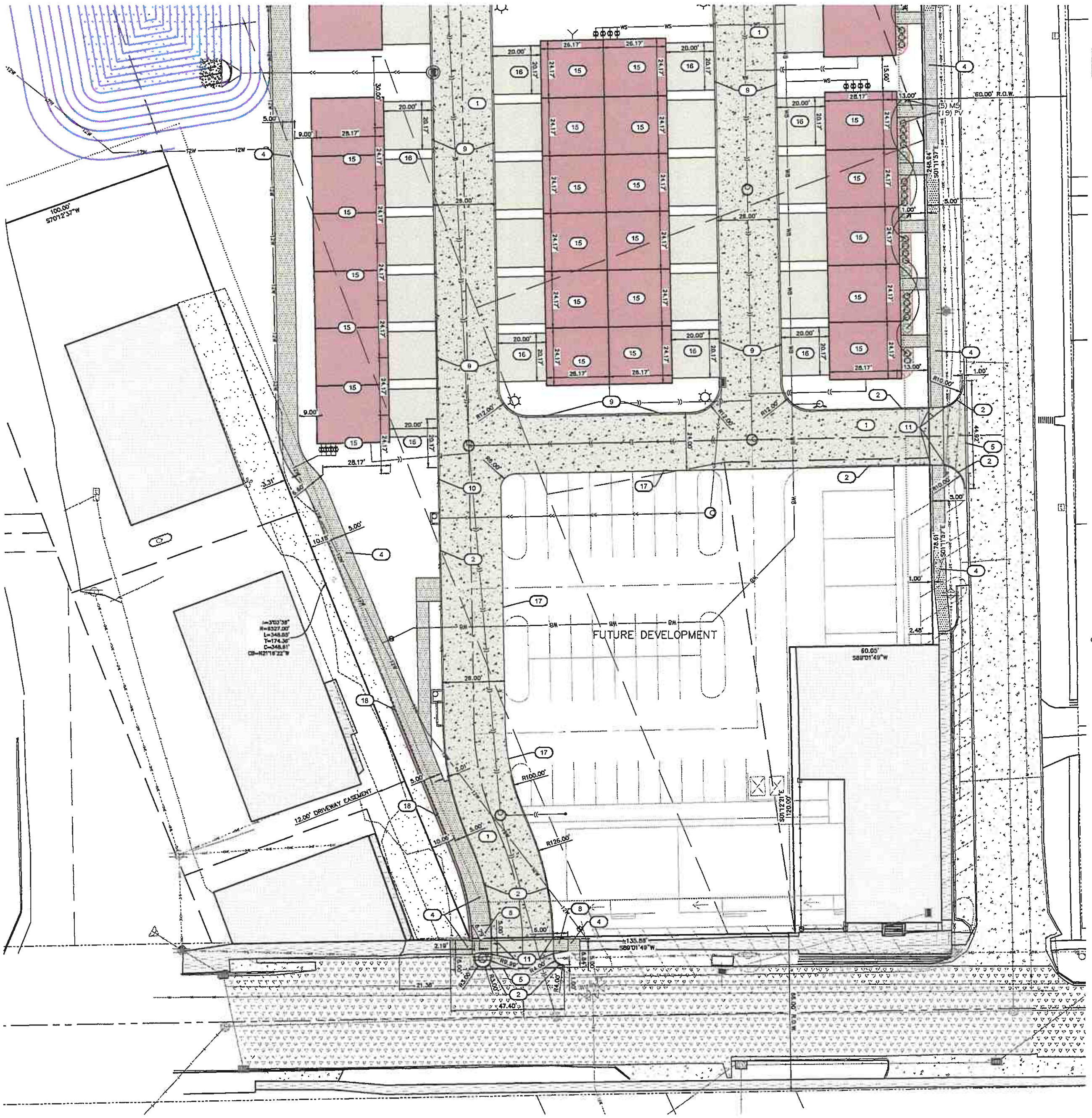
Date	Revision
8/24/22	INTERNAL REVIEW - KJC
8/01/22	INTERNAL REVIEW - KJC

DETAILED SITE LAYOUT AND DIMENSION PLAN - NORTH HALF

HERITAGE HILL, LOT 1
WEST BRANCH, CEDAR COUNTY, IOWA

MMS CONSULTANTS, INC.

Date:	08-04-22
Designed by: KJC	Field Book No: 1343, PG 36
Drawn by: TAV	Scale: 1"=20'
Checked by: KJB	Sheet No:
Project No: 11186-002	C121



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IOWA 811 ONE CALL SM

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NORTH

0 2 5 10 15 20
GRAPHIC SCALE IN FEET
1"=20'

KEYNOTES

NUMBER	KEYNOTE	DETAIL
1	INSTALL DRIVE AND PARKING (SEE PAVING LEGEND TABLE THIS SHEET FOR THICKNESS AND MATERIAL)	
2	INSTALL STANDARD 6" CURB AND GUTTER	
3	INSTALL THICKENED EDGE SIDEWALK	
4	INSTALL 4" PCC SIDEWALK	
5	REMOVE EXISTING CURB AND GUTTER SECTION AND CONNECT TO EXISTING PCC PAVING W/ "BT-5" JOINT	
6	INSTALL 4" WIDE PAVEMENT MARKINGS (TYP)	
7	HANDICAP PARKING STRIPING AND SIGNAGE PER DETAIL SHEET 8	
8	INSTALL ADA RAMP	
9	INSTALL 3" ROLL CURB AND GUTTER	
10	TRANSITION TO 6" CURB	
11	TRANSITION CURB TO ZERO	
12	MATCH EXISTING CURB AND GUTTER	
13	INSTALL DUMPSTER ENCLOSURE	
14	RESIDENTIAL 12-PLEX (3 STORY) BUILDING 4 UNITS EACH FLOOR	
15	RESIDENTIAL 2 BEDROOM UNIT (3 STORY) WITH 2 STALL GARAGE AT MAIN LEVEL	
16	INSTALL DRIVEWAY (SEE PAVING LEGEND TABLE THIS SHEET FOR THICKNESS AND MATERIAL)	
17	EDGE OF PAVEMENT, NO CURB	
18	INSTALL LANDSCAPE BLOCK RETAINING WALL (DESIGNED BY OTHERS)	

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HERITAGE HILL, LOT 1
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Date:	08-04-22		
Designed by:	KLC	Field Book No:	1343, PG 39
Drawn by:	TAV	Scale:	1"=20'
Checked by:	KJB	Sheet No:	C122
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- 22-1 CURVE SEGMENT NUMBER
- EXIST. / PROP.
- POWER POLE
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- POWER POLE W/TRANS
- POWER POLE W/LIGHT
- GUY POLE
- LIGHT POLE
- SANITARY MANHOLE
- FIRE HYDRANT
- WATER VALVE
- DRAINAGE MANHOLE
- CURB INLET
- FLARED END
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING STORM SEWER
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- WATER LINES
- ELECTRICAL LINES
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- GAS LINES
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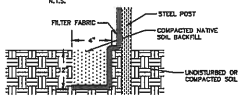
SILT FENCE DETAIL

N.T.S.



INSTALLATION

1. POSTS SHALL BE 1.33 POUNDS PER LINEAL FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.
2. SILT FENCE FABRIC SHALL CONFORM TO I.D.O.T. STANDARD SPECIFICATION SECTION 4196.01.A. SILT FENCING SHALL BE A MINIMUM OF 24" AND A MAXIMUM OF 36" HIGH WHEN COMPLETE.
3. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE FENCE TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, THE FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6" OVERLAP, AND SECURELY SEALED.
4. POSTS SHALL BE SPACED A MAXIMUM OF 8 FEET APART AND DRIVEN SECURELY INTO THE GROUND ALONG THE FENCE ALIGNMENT. POSTS SHALL BE DRIVEN INTO THE GROUND A MINIMUM OF 28".
5. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4" WIDE BY 12" DEEP ALONG THE UPSLOPE SIDE OF THE POSTS.
6. FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE POSTS SUCH THAT THE FABRIC EXTENDS INTO THE TRENCH AS SHOWN ABOVE. THE FABRIC SHALL BE FASTENED A MINIMUM OF THREE PLACES ON EACH POST.
7. THE TRENCH SHALL BE BACK FILLED WITH EXCAVATED MATERIAL AND THOROUGHLY COMPACTED.

MAINTENANCE

1. SILT FENCES SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT OF 0.5 INCHES OR MORE. DURING PERIODS OF PROLONGED RAIN INSPECTIONS SHALL BE AT LEAST DAILY. ANY REPAIRS NEEDED TO MAINTAIN THE SILT FENCE'S EFFECTIVENESS SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO STABILIZING THE UPSLOPE AREAS THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN THE DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE FENCE. SILTS REMOVED SHALL BE PLACED IN A PROTECTED PLACE THAT WILL PREVENT THEIR ESCAPE FROM THE CONSTRUCTION SITE.
4. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER NEEDED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.
5. SILT FENCE SHALL REMAIN IN PLACE UNTIL IT IS NO LONGER NEEDED AS DIRECTED BY THE POLLUTION PREVENTION PLAN. GENERALLY SILT FENCES SHALL REMAIN UNTIL THE UPSLOPE AREAS ARE STABILIZED WITH AN ESTABLISHED GRASS COVER AS A MINIMUM.

GRADING AND EROSION CONTROL NOTES

TOTAL SITE AREA: 5.93 ACRES
TOTAL AREA TO BE DISTURBED: 5.93 ACRES

EROSION CONTROL MEASURES SHOWN SHALL BE USED DURING FILL ACTIVITIES. EROSION CONTROL MEASURES SHALL BE REEVALUATED AND MODIFIED, IF NECESSARY, AT THE TIME OF SITE DEVELOPMENT.

ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES THAT COULD BE USED ON SITE, IF NEEDED, CAN BE FOUND IN APPENDIX D OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) BINDER PREPARED FOR THE SITE. IF ADDITIONAL MEASURES ARE USED, INDICATE THE TYPE AND LOCATION OF SAID MEASURE ON THIS PLAN.

CONTRACTOR SHALL INSTALL A ROCK ENTRANCE AND PERFORM REGULAR CLEANING OF VEHICLES THAT LEAVE THE SITE.

FOLLOWING INSTALLATION OF PERIMETER SILT FENCE AND TEMPORARY CONSTRUCTION ENTRANCE THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR TO SCHEDULE A SITE INSPECTION PRIOR TO ANY SOIL DISTURBING ACTIVITIES.

THE CONTRACTOR SHALL FOLLOW THE NPDES PERMIT, SWPPP, AND THE CITY CSR REGULATIONS.

THE EROSION CONTROL CONTRACTOR SHALL INSTALL FILTER SOCKS OR OTHER APPROVED FORM OF INLET PROTECTION AT EACH STREET INTAKE ADJACENT TO THE SITE.

GRADING NOTES

1.) MAXIMUM SLOPE ON CUTS AND FILLS SHALL BE 3.5: HORIZONTAL TO 1: VERTICAL.

2.) NO EXCAVATION SHALL BE ALLOWED WITHIN 2' OF PROPERTY LINES.

3.) WHERE HEIGHT OF FILL IS GREATER THAN 30' AN INTERMEDIATE TERRACE OF AT LEAST 8' WIDE SHALL BE ESTABLISHED AT MID HEIGHT. SEE TYPICAL FILL SECTION.

4.) COMPACTION TO BE 90% MODIFIED PROCTOR WHERE > 8:1 SLOPE.

5.) ALL TREES OUTSIDE THE LIMITS OF GRADING OPERATIONS SHALL BE SAVED, UNLESS OTHERWISE INDICATED TO BE REMOVED. TREES NEAR THE EDGES OF GRADING LIMITS AND IN THE STORM WATER DETENTION BASIN AREAS SHALL BE SAVED IF POSSIBLE, WITHIN THE REQUIREMENTS OF THE SPECIFICATIONS.

6.) PRIOR TO ANY GRADING A CONSTRUCTION SAFETY FENCE SHALL BE INSTALLED 50 FEET FROM TRUNKS OF TREES TO BE PROTECTED.

7.) STABILIZATION SEEDING SHALL BE COMPLETED AS SOON AS POSSIBLE, BUT NOT MORE THAN 14 DAYS, UPON COMPLETION OF GRADING IN ANY AREA OF GRADING OPERATIONS. DISTURBED AREAS SHALL BE KEPT AS SMALL AS POSSIBLE TO PREVENT LARGE SCALE EROSION PROBLEMS. IF THE GRADING CONTRACTOR STOPS GRADING OPERATIONS FOR MORE THAN 14 DAYS, THEN STABILIZATION SEEDING SHALL BE DONE ON ALL DISTURBED AREAS.

8.) SILT FENCE LOCATIONS AND LENGTHS, AS INDICATED, ARE APPROXIMATE ONLY. FINAL LOCATIONS AND LENGTHS WILL BE DETERMINED, AS NEEDED, UPON COMPLETION OF GRADING OPERATIONS IN AN AREA.

9.) ALL STREET SUBGRADES SHALL BE CONSTRUCTED AND COMPACTED IN ACCORDANCE WITH SUDAS DESIGN AND CONSTRUCTION STANDARDS AND PROCEDURES.

THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PER IDOT STANDARD ROAD PLAN TC-419 OR SUDAS 8030-110 REQUIREMENTS AT ALL TIMES DURING WORK WITHIN PUBLIC R.O.W.

THE CONTRACTOR SHALL COORDINATE WITH UTILITY PROVIDERS FOR ANY REQUIRED RELOCATION OF EXISTING UTILITIES.

NOTES:

1. TEMPORARY STABILIZATION IS REQUIRED ON DISTURBED AREAS AFTER THE 14TH DAY OF INACTIVITY.
2. FINAL STABILIZATION SHALL BE IMPLEMENTED WITHIN 14 DAYS OF FINAL GRADING COMPLETION.

EROSION CONTROL LEGEND

- FINAL FILTER SOCK
- SILT FENCE
- FILTER SOCK
- TEMPORARY ROCK CONSTRUCTION ENTRANCE/EXIT
- TEMPORARY PARKING AND STORAGE
- CW CONCRETE TRUCK/EQUIPMENT WASHOUT
- PR PORTABLE RESTROOM
- DL DOCUMENT LOCATION (PERMITS, SWPPP, INSPECTION FORMS, ETC.)
- FILTER SOCK INLET PROTECTION
- FILTER SOCK BEHIND CURB AT CURB RAMP
- PERIMETER SILT FENCE
- EROSION CONTROL MATTING
- TEMPORARY SOIL STOCKPILE AREA
- DIRECTION OF OVERLAND FLOW
- D DUMPSTER FOR CONSTRUCTION WASTE
- RIP RAP OUTLET PROTECTION
- 01 OTHER MEASURE: _____
- 02 OTHER MEASURE: _____
- 03 OTHER MEASURE: _____

THE ABOVE LISTED ITEMS ARE SHOWN IN THEIR RECOMMENDED LOCATIONS. IF A CONTROL MEASURE IS ADDED OR MOVED TO A MORE SUITABLE LOCATION, INDICATE THE REVISION ON THIS SHEET. THE BLANKS LEFT FOR OTHER MEASURES SHOULD BE USED IF AN ITEM NOT SHOWN ABOVE IS IMPLEMENTED ON SITE. ADDITIONAL PRACTICES FOR EROSION PREVENTION AND SEDIMENT CONTROL CAN BE FOUND IN APPENDIX D OF THE SWPPP.

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www.mmsconsultants.net

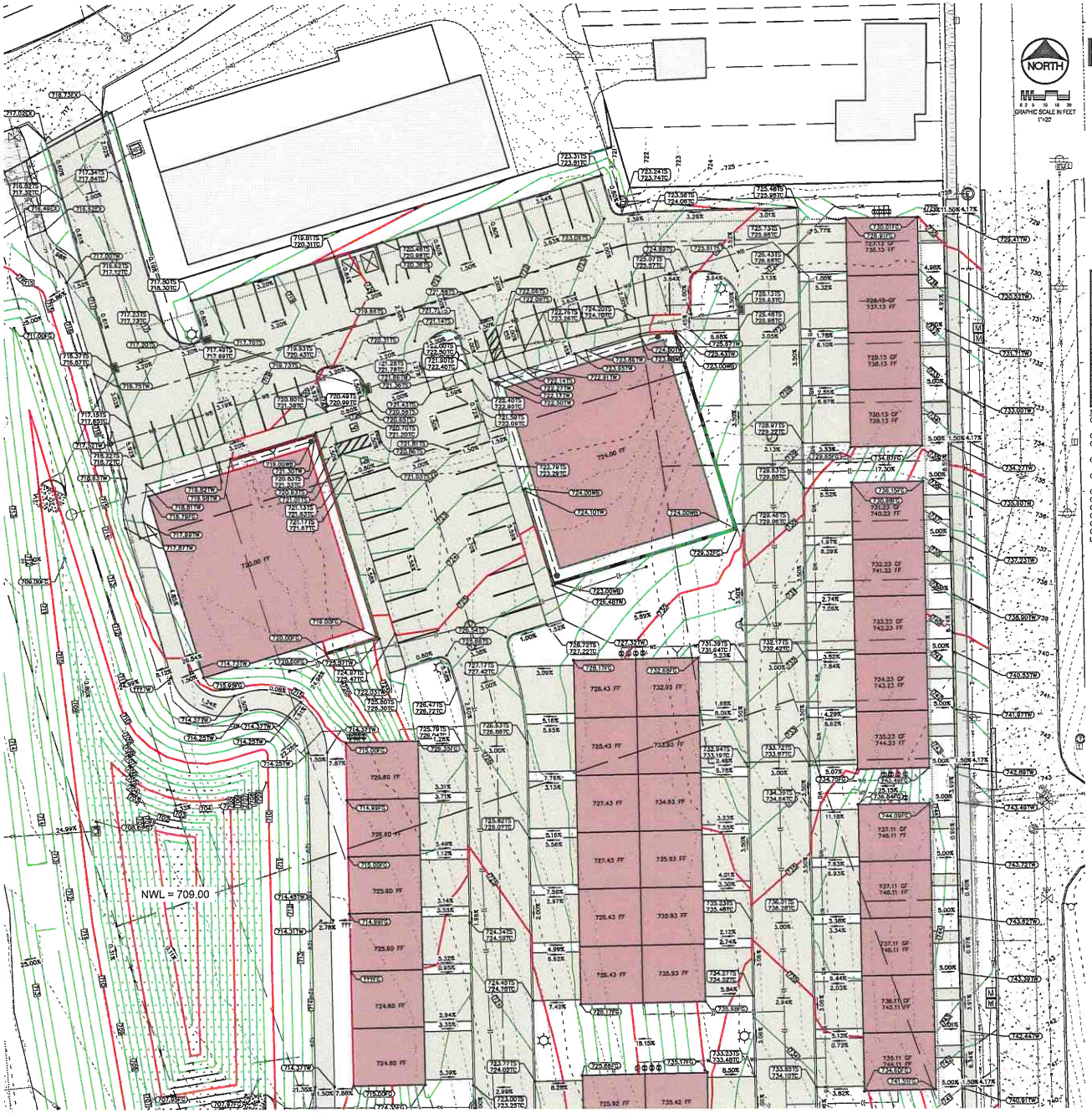
Date	Revision
6/24/22	INTERNAL REVIEW - KJC
9/01/22	INTERNAL REVIEW - KJC

SITE GRADING AND EROSION CONTROL PLAN AND SWPPP

HERITAGE HILL, LOT 1
WEST BRANCH, CEDAR COUNTY, IOWA

MMS CONSULTANTS, INC.

Date:	08-04-22
Designed by: KJC	Field Book No: 1343, PG 38
Drawn by: TAV	Scale: 1"=40'
Checked by: KJB	Sheet No: C140
Project No: 11186-002	of:



SITE PLAN
HERITAGE HILL - LOT 1
WEST BRANCH, IOWA

NORTH

GRAPHIC SCALE IN FEET 1"=20'

PLAT PREPARED BY:
MMS CONSULTANTS INC.
1917 S. GILBERT STREET
IOWA CITY, IA 52240

APPLICANT:
SSCO LLC
PO BOX 277
WEST LIBERTY, IOWA 52776

APPLICANT'S ATTORNEY:
JAMES D. HOUGHTON
216 STEVENS DRIVE
IOWA CITY, IA 52240

UTILITIES

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IOWA 811 ONE CALL℠

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STANDARD LEGEND AND NOTES

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- 0000.00EG – EXISTING GRADE
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- 0000.00TR – TOP RIM
- 0000.00WB – BOTTOM WALL*
- 0000.00WT – TOP WALL*

*REPRESENT GROUND ELEVATION AT WALL

5.93 AC.

MMS

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Date	Revision
8/24/22	INTERNAL REVIEW - KJC
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DETAILED GRADING PLAN - NORTH HALF

HERITAGE HILL, LOT 1
WEST BRANCH, CEDAR COUNTY, IOWA

MMS CONSULTANTS, INC.

Date:	08-04-22
Designed by: KLC	Field Book No. 1343, PG 39
Drawn by: TAV	Scale: 1"=20'
Checked by: KJB	Sheet No: C141
Project No: 11186-002	of:

SITE PLAN
HERITAGE HILL - LOT 1
WEST BRANCH, IOWA

5.93 AC.

PLAT PREPARED BY:
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1917 S. GILBERT STREET
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RBCO LLC
PO BOX 277
WEST LIBERTY, IOWA 52776

APPLICANT'S ATTORNEY:
JAMES D. HOUGHTON
216 STEVENS DRIVE
IOWA CITY, IA 52240

NORTH

0 2 5 10 15 20
GRAPHIC SCALE IN FEET
1"=20'

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IOWA ONE CALL

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DETAILED GRADING PLAN - SOUTH HALF

HERITAGE HILL, LOT 1
WEST BRANCH, CEDAR COUNTY, IOWA

MMS CONSULTANTS, INC.

Date:	08-04-22
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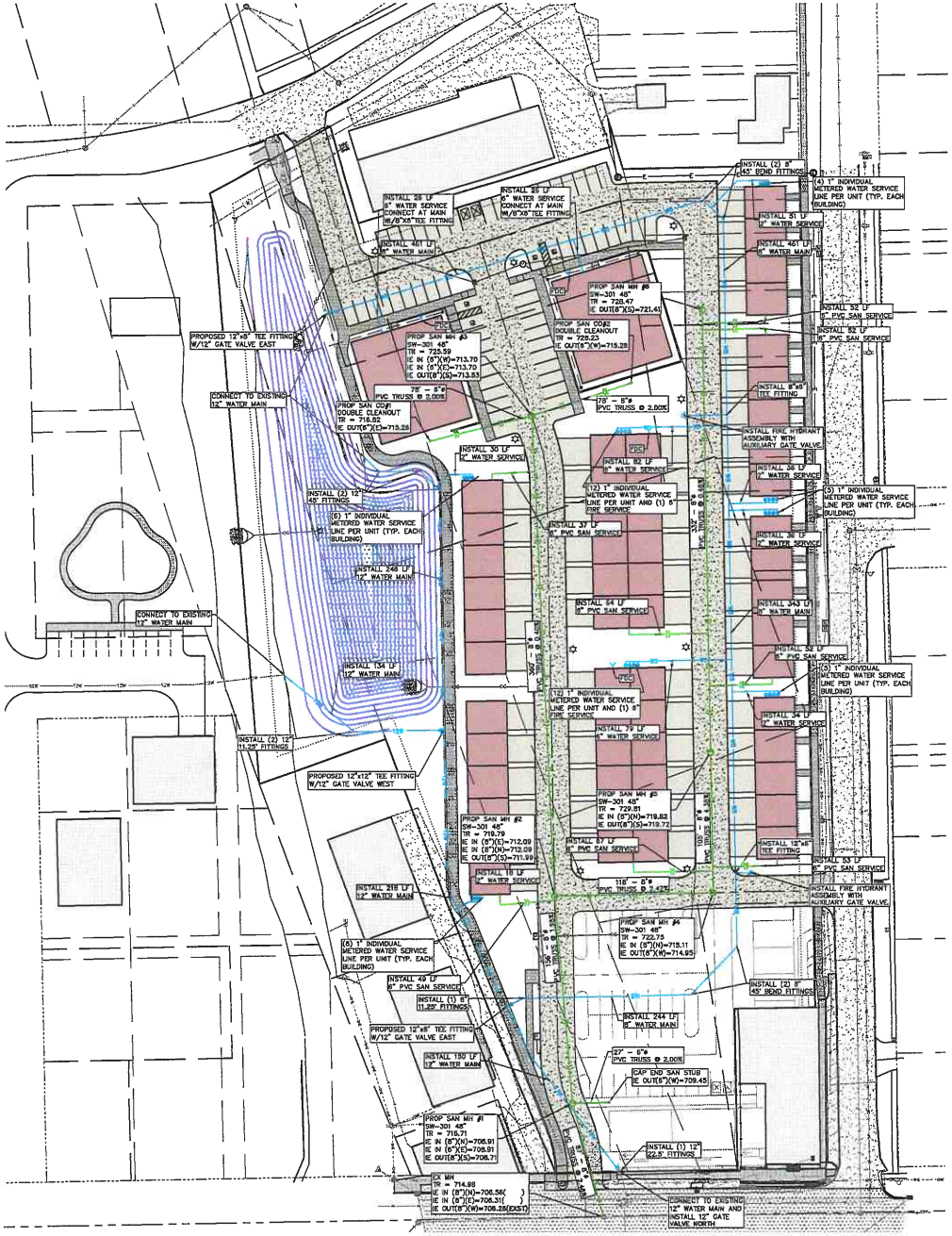

NORTH

GRAPHIC SCALE IN FEET
1"=40'

SITE PLAN
HERITAGE HILL - LOT 1
WEST BRANCH, IOWA

5.93 AC.

PLAT PREPARED BY:
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IOWA ONE CALL 811

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UTILITY PLAN:
SEWER AND WATER

HERITAGE HILL, LOT 1
WEST BRANCH, CEDAR COUNTY, IOWA

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Date:	08-04-22
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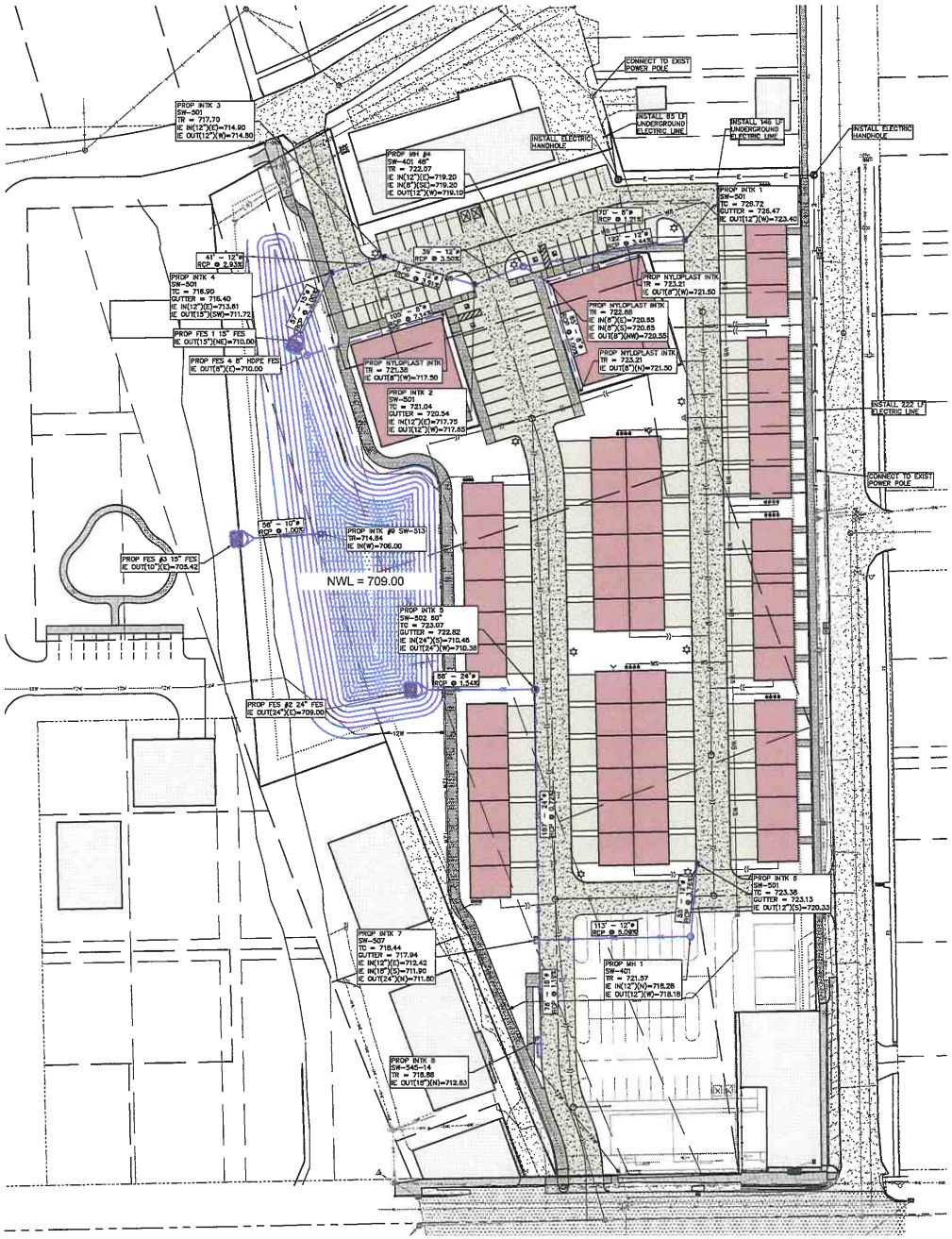

NORTH

GRAPHIC SCALE IN FEET
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L100	LANDSCAPE PLAN

SITE PLAN
HERITAGE HILL - LOT 1
WEST BRANCH, IOWA

PLAT PREPARED BY:
MMS CONSULTANTS INC.
1917 S. GILBERT STREET
IOWA CITY, IA 52240

APPLICANT:
BROOTUC
PO BOX 277
WEST LIBERTY, IOWA 52776

APPLICANT'S ATTORNEY:
JAMES D. HOUGHTON
216 STEVENS DRIVE
IOWA CITY, IA 52240

UTILITIES

THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL AT 811 OR 800/292-8989 NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THESE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

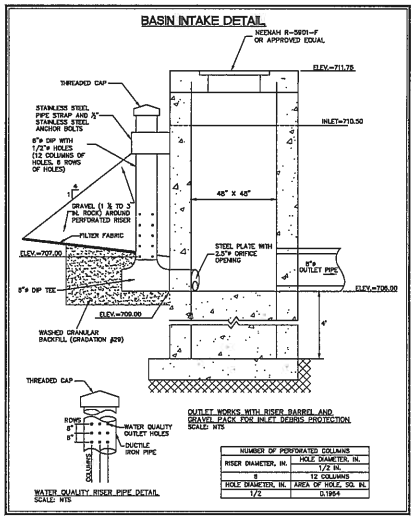
IOWA ONE CALL SM

STANDARD LEGEND AND NOTES

- PROPERTY &/or BOUNDARY LINES
- CONGRESSIONAL SECTION LINES
- RIGHT-OF-WAY LINES
- EXISTING RIGHT-OF-WAY LINES
- CENTER LINES
- EXISTING CENTER LINES
- LOT LINES, INTERNAL
- LOT LINES, PLATTED OR BY DEED
- PROPOSED EASEMENT LINES
- EXISTING EASEMENT LINES
- BENCHMARK
- (R) RECORDED DIMENSIONS
- 22-1 CURVE SEGMENT NUMBER
- –DIST– –PROP– POWER POLE
- POWER POLE W/GHOP
- POWER POLE W/TRANS
- POWER POLE W/LIGHT
- GUY POLE
- LIGHT POLE
- SANITARY MANHOLE
- FIRE HYDRANT
- WATER VALVE
- DRAINAGE MANHOLE
- CURB INLET
- FENCE LINE
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- WATER LINES
- ELECTRICAL LINES
- TELEPHONE LINES
- GAS LINES
- CONTOUR LINES (1' INTERVAL)
- PROPOSED GROUND
- EXISTING TREE LINE
- EXISTING DECIDUOUS TREE & SHRUB
- EXISTING EVERGREEN TREES & SHRUBS

THE ACTUAL SIZE AND LOCATION OF ALL PROPOSED FACILITIES SHALL BE VERIFIED WITH CONSTRUCTION DOCUMENTS, WHICH ARE TO BE PREPARED AND SUBMITTED SUBSEQUENT TO THE APPROVAL OF THIS DOCUMENT.

BASIN INTAKE DETAIL



NUMBER OF PERFORATED COLUMNS	
RISER DIAMETER, IN.	HOLE DIAMETER, IN.
8	1/2 IN.
	12 COLUMNS
HOLE DIAMETER, IN.	AREA OF HOLE, SQ. IN.
1/2	0.1964

5.93 AC.

MMS
CIVIL ENGINEERS
LAND PLANNERS
LAND SURVEYORS
LANDSCAPE ARCHITECTS
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Date	Revision
8/24/22	INTERNAL REVIEW - KJC
9/01/22	INTERNAL REVIEW - KJC

UTILITY PLAN:
STORM AND ELETRIC

HERITAGE HILL, LOT 1
WEST BRANCH, CEDAR COUNTY, IOWA

MMS CONSULTANTS, INC.

Date:	08-04-22
Designed by: KJC	Field Book No. 1343, PG 39
Drawn by: TAV	Scale: 1"=40'
Checked by: KJB	Sheet No.
Project No. 11186-002	C161 of.

SANITARY SEWER AND WATERMAIN NOTES

1) SANITARY SEWER & WATER MAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) SPECIFICATIONS (2016) AS AMENDED.
2) SANITARY SEWERS SHALL BE PVC TRUSS PIPE (SUDAS 4010.2.01,E), CONTECH A-2000, OR CITY ENGINEER APPROVED EQUAL AS NOTED ON THE PLANS. SANITARY SEWER SERVICE LINES SHALL BE PVC SDR-23.5 WITH GASKETED JOINTS.
3) WATER MAINS SHALL BE DIP CLASS 52 WITH NITRILE GASKETS.
4) CONTRACTOR TO PROVIDE FERNCO STRONG BACK RC 1000 SERIES COUPLINGS FOR DISSIMILAR PIPE CONNECTIONS.
5) GRANULAR TRENCH BACKFILL SHALL BE CRUSHED STONE CONFORMING TO I.D.O.T. STANDARD SPECIFICATION 4120.04 WITH 1" MAXIMUM AGGREGATE SIZE. COMPACT TO 90% MODIFIED PROCTOR DENSITY.
6) ALL SANITARY SEWERS SHADED ON THE PROFILE VIEW AND ALL SANITARY SEWERS AND WATER MAINS UNDER PAVING OR WITHIN 3 FEET OF PAVEMENT SHALL BE BACKFILLED WITH EITHER OF THE FOLLOWING COMPACTED TO 90% MODIFIED PROCTOR DENSITY:
   A. SUITABLE EXCAVATED MATERIAL. IF EXCAVATED MATERIAL IS NOT SUITABLE, THEN
   B. CRUSHED STONE AS SPECIFIED FOR GRANULAR TRENCH BACKFILL.
7) ALL SANITARY SEWER SERVICE LINES CROSSING STREET RIGHT-OF-WAY SHALL BE BACKFILLED IN ACCORDANCE WITH THE PRECEDING NOTE.
8) CONTRACTOR SHALL PROVIDE SUDAS CLASS F-3 BEDDING FOR ALL PVC TRUSS SANITARY SEWERS UNLESS OTHERWISE NOTED.
9) ENTRY INTO EXISTING CITY MANHOLE TO BE BY CORE DRILL AND SEAL BY "LINK-SEAL" PENETRATION SEAL OR CITY ENGINEER APPROVED EQUAL.
10) ALL MANHOLES TO BE TURNED OVER TO CITY SHALL:
   1) WILL NOT SHOW STEPS.
   2) WILL HAVE EXTERNAL CHIMNEY SEAL BY INFISHEILD UNIBAND, CRETEX, OR APPROVED EQUAL.
   3) WILL HAVE MANHOLE FRAME AND LID TO BE NEENAH R-1642 SELF-SEALING WITH CITY LOGO.
   4) WILL HAVE RISERS RINGS OF CRETEX PRO-RING, AMERICAN HIGHWAY PRODUCTS RUBBER ADJUSTMENT RING OR STANDARD PCC. IF PCC RINGS ARE USED, SHIMS TO LEVEL MANHOLE FRAME MADE OF MATERIALS OTHER THAN PCC OR THE RING MATERIAL DISCUSSED ABOVE WILL NOT BE ALLOWED, IE: WOOD, BRICK, ROCKS, ETC.
   5) WILL USE LINK-SEALS PENETRATION SEALS FOR PIPE PENETRATIONS.

ALL SANITARY SEWER SERVICE LINES SHALL BE EXTENDED :

9) TO THE UTILITY EASEMENT LINE FOR THOSE LOCATIONS WHERE THE LOTS BEING SERVED ARE ON THE OPPOSITE SIDE OF THE STREET FROM THE SEWER MAIN.
10) TO THE UTILITY EASEMENT LINE FOR THOSE LOCATIONS WHERE THE LOTS BEING SERVED ARE ADJACENT TO THE SEWER MAIN.
11) THE END OF ALL SANITARY SEWER SERVICES MUST BE MARKED WITH A WOOD 2 x 4 PAINTED GREEN.
12) ALL SANITARY SEWER MANHOLES IN PAVING AREAS OR AREAS SUBJECT TO WATER INUNDATION SHALL BE PROVIDED WITH CRETEX EXTERIOR CHIMNEY SEAL OR APPROVED EQUAL. ALL SANITARY MANHOLES IN PAVING SHALL HAVE 3-PIECE FLOATING CASTING

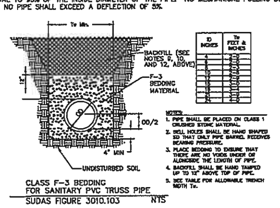
AIR TESTING

13) ALL SANITARY SEWER AND SERVICE LINES SHALL BE AIR TESTED TO PASS THE FOLLOWING TEST: NOTE: CITY REPRESENTATIVE MUST BE PRESENT DURING TESTING.
   A. PERFORM FROM MANHOLE-TO-MANHOLE AFTER BACKFILL.
   B. PLACE PNEUMATIC PLUGS: (1) SEALING LENGTH: EQUAL TO OR GREATER THAN PIPE DIAMETER, (2) CAPABLE OF RESISTING INTERNAL TEST PRESSURE WITHOUT EXTERNAL BRACING OR BLOCKING.
   C. INTRODUCE LOW-PRESSURE AIR INTO SEALED LINE AND ACHIEVE INTERNAL AIR PRESSURE OF 5 psi & MAINTAIN FOR A MINIMUM OF 5 MINUTES.
   D. LIMIT INTERNAL PRESSURE IN SEALED LINE BELOW 8 PSIG.
   E. ALLOW 2 MINUTES MINIMUM FOR AIR PRESSURE TO STABILIZE. DISCONNECT LOW-PRESSURE AIR HOSE FROM CONTROL PANEL.
   F. MINIMUM TIME FOR PRESSURE TO DROP FROM 3.5 TO 2.5 PSIG GREATER THAN MAXIMUM PRESSURE EXERTED BY GROUNDWATER ABOVE PIPE INVERT:

PIPE DIAMETER IN INCHES	TIME IN MINUTES
4	2.0
6	3.0
8	4.0
10	5.0
12	5.5
15	7.5

   G. IN AREAS WHERE GROUND WATER IS KNOWN TO EXIST, THE HEIGHT OF WATER ABOVE THE TOP OF THE PIPE BEING TESTED, IN FEET, SHALL BE DETERMINED AND THAT HEIGHT DIVIDED BY 2.3 TO ESTABLISH THE PRESSURE THAT WILL BE ADDED TO ALL READINGS ABOVE. ALTERNATIVELY, THE ENGINEER MAY ALLOW THE CONTRACTOR TO MEASURE INFILTRATION INTO THE SEWER BY USING A V-NOTCH WEIR OR OTHER SUITABLE DEVICE.
   H. LOCATE, REPAIR AND RETEST LEAKS.
   I. AIR TESTING SHALL BE CONSIDERED INCIDENTAL TO SANITARY SEWER CONSTRUCTION.

ALL PVC TRUSS SEWERS SHALL HAVE A DEFLECTION TEST PERFORMED AS FOLLOWS:
A) DEFLECTION TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS.
B) DEFLECTION TEST TO BE CONDUCTED USING A RIGID BALL OR MANDREL WITH A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. NO MECHANICAL PULLING DEVICES ALLOWED.
C) NO PIPE SHALL EXCEED A DEFLECTION OF 5%.



NOTES:
1. PIPE SHALL BE PLACED ON CLASS 1 CRUSHED STONE MATERIAL.
2. BELL HOLES SHALL BE HAND SHAPED SO THAT ONLY PIPE BARREL RECEIVES BEARING PRESSURE.
3. PLACE BEDDING TO ENSURE THAT THERE ARE NO VOIDS UNDER OR ALONGSIDE THE LENGTH OF PIPE.
4. BACKFILL SHALL BE HAND TAMPED UP TO 12" ABOVE TOP OF PIPE.
5. SEE TABLE FOR ALLOWABLE TRENCH WIDTH Tr.

CLASS F-3 BEDDING
FOR SANITARY PVC TRUSS PIPE
SUDAS FIGURE 3010.103 NTS

THE FOLLOWING MINIMUM CLEARANCES MUST BE MAINTAINED :

14) WATER MAIN SHALL BE LOCATED 10 FEET HORIZONTALLY DISTANT FROM ALL SANITARY SEWER AND STORM SEWER.
15) WATER MAIN SHALL NOT PASS THROUGH NOR CONTACT A SEWER OR A SEWER MANHOLE. A MINIMUM HORIZONTAL SEPARATION OF 3 FEET SHALL BE MAINTAINED.
16) VERTICAL SEPARATION OF WATER MAINS CROSSING OVER ANY SANITARY SEWER SHOULD BE A MINIMUM OF 18-INCHES, MEASURED OUTSIDE TO OUTSIDE FROM THE CLOSEST EDGE OF EACH PIPE. IF PHYSICAL CONDITIONS PROHIBIT THIS SEPARATION, THE WATER MAIN SHALL NOT BE PLACED CLOSER THAN 6-INCHES ABOVE A SEWER OR 18-INCHES BELOW A SEWER. THE SEPARATION DISTANCE SHALL BE THE MAXIMUM FEASIBLE IN ALL CASES.
17) WHERE THE WATER MAIN CROSSES SEWER, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS ARE AS FAR AS POSSIBLE FROM THE SEWER. THE WATER AND SEWER PIPES MUST BE ADEQUATELY SUPPORTED AND HAVE WATER TIGHT JOINTS. A LOW PERMEABILITY SOIL SHALL BE USED FOR BACKFILL MATERIAL WITHIN 10-FEET OF THE POINT OF CROSSING.
18) NOMINAL DEPTH OF WATER MAIN = 5.5 FEET TO TOP OF PIPE.
19) EXISTING OR PROPOSED VALVE BOXES THAT FALL WITHIN PAVEMENT MUST HAVE A SLIP-TYPE VALVE BOX.
20) THE ENTIRE WATERMAIN SYSTEM, INCLUDING SERVICES TAPS IF APPLICABLE, SHALL BE PRESSURE TESTED PER AWWA C600. THE TEST SHALL BE PERFORMED AT A MINIMUM OF 150 psi FOR 2 HOURS WITH A MAXIMUM LOSS OF 5 psi.
21) WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH SPECIFICATIONS.
22) FIRE HYDRANTS SHALL BE MUELLER SUPER CENTURIAN 250 OR APPROVED CITY EQUAL THAT OPEN RIGHT.
23) BED WATER MAIN ON NATIVE MATERIAL, DIG IN BELLS, AND BACKFILL WITH SUITABLE MATERIAL.
24) ALL CONCRETE SANITARY MANHOLES SHALL HAVE CONSHIELD ANTI-MICROBIAL ADDITIVE INCORPORATED IN THE CONCRETE MIX.

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS, OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THOSE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THAT THERE MAY BE OTHER FACILITIES IN THE CONSTRUCTION AREA, THE EXISTENCE OF WHICH IS NOT PRESENTLY KNOWN OR SHOWN HEREON. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION, AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

STORM SEWER NOTES

1) STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD DETAILED SPECIFICATIONS AND DETAILED SPECIFICATION REQUIREMENTS PREPARED FOR THIS PROJECT. CITY OF WEST BRANCH DESIGN AND CONSTRUCTION STANDARDS AND PROCEDURES SHALL PREVAIL.
2) ALL STORM SEWERS SHALL BE CLASS 3 RCP UNLESS NOTED OTHERWISE IN THE PLANS.
3) AT PLACES WHERE A FLARED END SECTION IS REQUIRED, PIPE LENGTH INCLUDES THE FLARED END. THE LAST TWO JOINTS ARE TO BE TIED WHERE FLARED END SECTIONS ARE REQUIRED.
4) ALL RCP STORM SEWERS SHALL BE PROVIDED WITH CLASS "C" BEDDING, UNLESS NOTED OTHERWISE. PVC SEWERS SHALL BE PROVIDED WITH CRUSHED STONE ENCASEMENT.
5) STORM SEWERS SHADED ON THE PROFILE VIEW SHALL BE BACKFILLED WITH EITHER OF THE FOLLOWING COMPACTED TO 90% MODIFIED PROCTOR DENSITY:
   A. SUITABLE EXCAVATED MATERIAL. IF EXCAVATED MATERIAL IS NOT SUITABLE, THEN
   B. CRUSHED STONE AS SPECIFIED FOR GRANULAR TRENCH BACKFILL SHALL BE USED.
6) GRANULAR TRENCH BACKFILL SHALL BE CRUSHED STONE CONFORMING TO I.D.O.T. STANDARD SPECIFICATION 4120.04 WITH 1" MAXIMUM AGGREGATE SIZE. COMPACT TO 90% MODIFIED PROCTOR DENSITY.
7) ALL STORM SEWERS SHALL HAVE CONFINED "O" RING GASKETS. STORM SEWERS 36" AND SMALLER SHALL HAVE BELL AND SPIGOT JOINTS. STORM SEWERS LARGER THAN 36" MAY HAVE TONGUE AND GROOVE JOINTS. NO MASTIC JOINTS ALLOWED.
8) ALL PIPE SHALL BE CERTIFIED.
9) ALL STORM INTAKES SHALL BE A MINIMUM OF 48 INCHES FROM TOP OF CURB/RIM TO SUBGRADE. IF INVERT ELEVATIONS ARE INSUFFICIENT TO PROVIDE THIS REQUIRED DEPTH, THE CONTRACTOR TO PROVIDE DEEPER STRUCTURE AND POUR CONCRETE FILLET IN INTAKE TO MAKE INTAKE PIPES DRAIN AT INVERT ELEVATIONS LISTED.
10) LIFT HOLES IN STORM SEWER WILL NOT BE ALLOWED.
11) PROVIDE CONCRETE FILLETS IN ALL NEW & EXISTING DRAINAGE STRUCTURES PER REFERENCED DETAILS.

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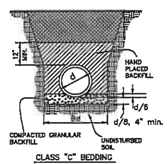
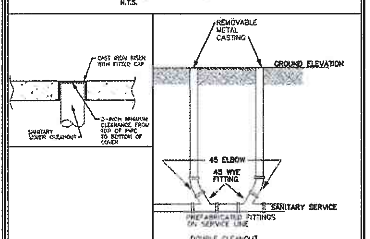


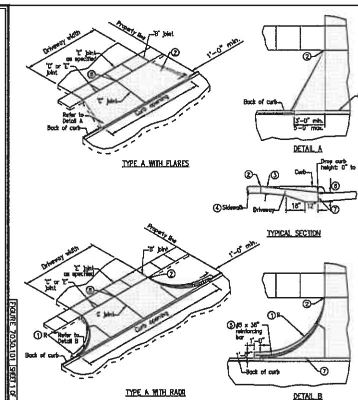
CLASS "C" BEDDING

NOTES:
1. PIPE SHALL BE PLACED ON CRUSHED STONE MATERIAL.
2. BELL HOLES SHALL BE HAND SHAPED SO THAT ONLY PIPE BARREL RECEIVES BEARING PRESSURE.
3. PLACE BEDDING TO ENSURE THAT THERE ARE NO VOIDS UNDER OR ALONGSIDE THE LENGTH OF PIPE.
4. BACKFILL SHALL BE HAND TAMPED UP TO 12" ABOVE TOP OF PIPE.
5. SEE TABLE FOR ALLOWABLE TRENCH WIDTH Bd.

ID INCHES	Bd FEET & INCHES
12	2-3
15	2-9
18	3-0
21	3-3
24	3-6
27	4-0
30	4-3
36	4-9
42	5-6
48	6-3

SIAMESE DETAIL
N.T.S.

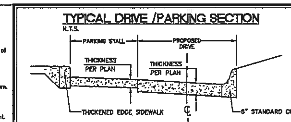




① Driveway radius (R).
Residential: 10 foot minimum, 15 foot maximum.
Commercial and Industrial: As specified in the contract documents.
② Transition the curb height to 0 inches at end of taper/radius or at the front edge of sidewalk. Do not extend raised curb across sidewalk.
③ Pavement thickness.
Residential: 6 inches minimum.
Commercial and Industrial: 7 inches minimum.
④ Sidewalk thickness through driveway to match thickness of driveway.
⑤ Center reinforcing bar vertically in the pavement.
⑥ Match thickness of adjacent roadway, 8 inches minimum.
⑦ Provide "E" joint at back of curb unless "B" joint is specified.
⑧ For alleys, invert the pavement crown 2% toward center of alley.
⑨ Target cross slope of 1.5% with a maximum cross slope of 2.0%. If specified in the contract documents, construct the sidewalk through the driveway 5 feet wide to serve as a passing space.
⑩ If cross slope of adjacent sidewalk panel exceeds 2.0%, remove and replace to transition from existing sidewalk to sidewalk through driveway. If elevation change requires a curb ramp, comply with figure 7030.205; verify need for detectable warning panel with Engineer.

REVISION NEW
FIGURE 7030.101
SHEET 1 OF 1
CONCRETE DRIVEWAY, TYPE A
FIGURE 7030.101 SHEET 1 OF 1

TYPICAL DRIVE /PARKING SECTION
N.T.S.



TYPICAL DRIVE/GARAGE APPROACH SECTION
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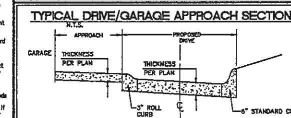
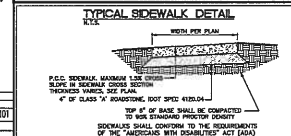


TYPICAL SIDEWALK DETAIL
N.T.S.



TYPICAL SIDEWALK INSTALLATION
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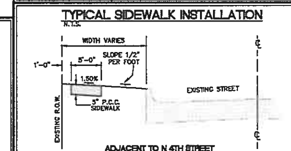
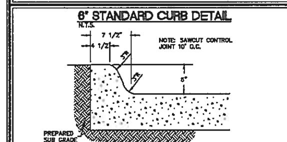
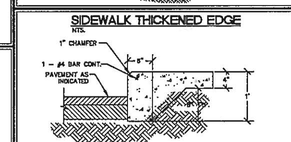


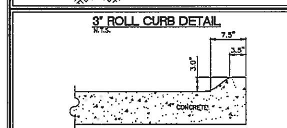
6" STANDARD CURB DETAIL
N.T.S.



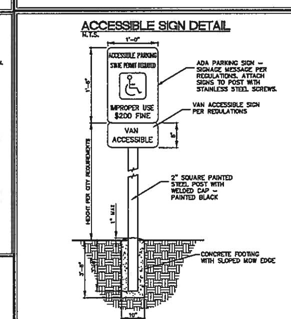
SIDEWALK THICKENED EDGE
NTS.



3" ROLL CURB DETAIL
N.T.S.

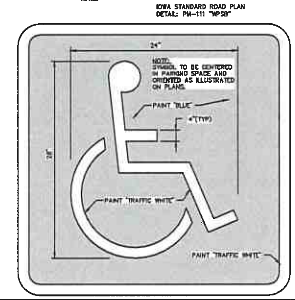


ACCESSIBLE SIGN DETAIL
N.T.S.

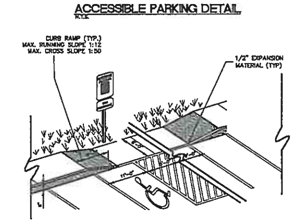


ACCESSIBLE PARKING SYMBOL
N.T.S.

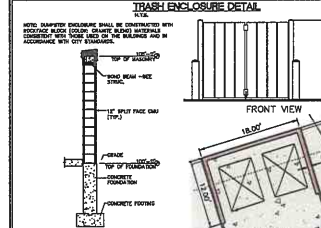
IOWA STANDARD ROAD PLAN
DETAIL: PM-111 "WPSB"



ACCESSIBLE PARKING DETAIL
N.T.S.



TRASH ENCLOSURE DETAIL
N.T.S.



SHEET INDEX

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C121	DETAILED SITE LAYOUT AND DIMENSION PLAN - NORTH HALF
C121	DETAILED SITE LAYOUT AND DIMENSION PLAN - SOUTH HALF
C140	GRADING AND EROSION CONTROL PLAN AND SWPPP
C141	DETAILED GRADING PLAN - NORTH HALF
C142	DETAILED GRADING PLAN - SOUTH HALF
C160	UTILITY PLAN: SANITARY AND WATER
C161	UTILITY PLAN: STORM AND ELECTRIC
C500	GENERAL NOTES AND DETAILS
C501	GENERAL NOTES AND DETAILS
L100	LANDSCAPE PLAN

5.93 AC.

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Date	Revision
8/24/22	INTERNAL REVIEW - KJC
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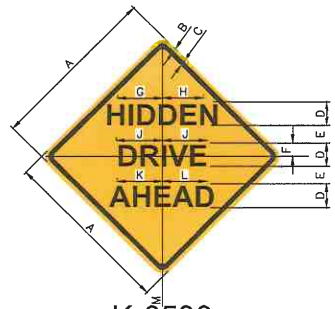
GENERAL NOTES AND DETAILS

HERITAGE HILL, LOT 1
WEST BRANCH, CEDAR COUNTY, IOWA

MMS CONSULTANTS, INC.

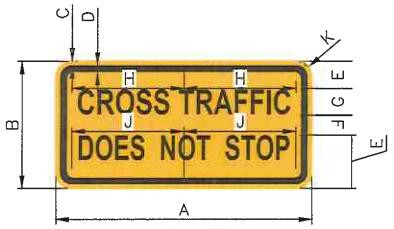
Date:	08-04-22
Designed by: KLC	Field Book No: 1343, PG 39
Drawn by: TAV	Scale: N/A
Checked by: KJB	Sheet No:
Project No: 11186-002	C500
	of:



K-6530
36"x36"

A	B	C	D	E	F	G	H	J	K	L	M
24	.375	.625	4D	3	2	4.803	6	9.747	5.844	5.724	1.5
30	.5	.75	5D	3.802	2.601	5.764	7.785	12.189	7.285	7.165	1.875
36	.625	.875	6D	4.483	3	6.845	9.367	14.631	8.886	8.446	2.25
48	.75	1.25	7D	5.243	3.522	8.326	10.608	17.052	10.167	10.047	3

COLORS: LEGEND — BLACK
BACKGROUND— YELLOW (RETROREFLECTIVE)



W4-4p
36" x 18"

MUTCD W4-4B SIGN

A	B	C	D	E	F	G	H	J	K	L	M	N
24	12	.375	.625	3	2.25 C	1.5	9.314	9.63	1.5	10.106	9.779	2.25 B
30	15	.5	.75	3.5	3 C	2	12.423	12.423	1.875	12.902	13.039	3 B
36	18	.625	.875	4	3.5 C	3	14.487	14.978	2.25	15.721	15.212	3.5 B
48	24	.75	1.25	5.5	4.5 C	4	18.628	19.259	3	20.214	19.56	4.5 B

COLORS: LEGEND — BLACK
BACKGROUND— YELLOW (RETROREFLECTIVE)

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CD100	EXISTING FEATURES AND DEMOLITION PLAN
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L100	LANDSCAPE PLAN

5.93 AC.

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(319) 351-8282
www.mmsconsultants.net

Date	Revision
8/24/22	INTERNAL REVIEW - KJC
9/01/22	INTERNAL REVIEW - KJC

GENERAL NOTES AND DETAILS

HERITAGE HILL, LOT 1
WEST BRANCH, CEDAR COUNTY, IOWA

MMS CONSULTANTS, INC.

Date: 08-04-22	
Designed by: KLC	Field Book No. 1343, PG 36
Drawn by: TAV	Scale: N/A
Checked by: KJR	Sheet No.
Project No. 11186-002	C501 of

NORTH

GRAPHIC SCALE IN FEET 1"=40'

SITE PLAN
HERITAGE HILL - LOT 1
WEST BRANCH, IOWA

5.93 AC.

PLAT PREPARED BY:
MMS CONSULTANTS INC.
1917 S. GILBERT STREET
IOWA CITY, IA 52240

APPLICANT:
BBCO LLC
PO BOX 277
WEST LIBERTY, IOWA 52776

APPLICANT'S ATTORNEY:
JAMES D. HOUGHTON
216 STEVENS DRIVE
IOWA CITY, IA 52240

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C501	GENERAL NOTES AND DETAILS
L100	LANDSCAPE PLAN

UTILITIES

IOWA ONE CALL

THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL AT 811 OR 800/292-8989 NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEY DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NATURE, OR EXACT LOCATION OF ALL UTILITIES. THE LOCATIONS OF MAINS IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THEREOF. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

STANDARD LEGEND AND NOTES

- PROPERTY &/or BOUNDARY LINES
- CONDEMNATION SECTION LINES
- RIGHT-OF-WAY LINES
- EXISTING RIGHT-OF-WAY LINES
- CENTER LINES
- EXISTING CENTER LINES
- LOT LINES, INTERNAL
- LOT LINES, PLATTED OR BY DEED
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- POWER POLE W/TRANS
- POWER POLE W/LIGHT
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- EXISTING DECIDUOUS TREE & SHRUB
- EXISTING EVERGREEN TREES & SHRUBS

THE ACTUAL SIZE AND LOCATION OF ALL PROPOSED FACILITIES SHALL BE VERIFIED WITH CONSTRUCTION DOCUMENTS, WHICH ARE TO BE PREPARED AND SUBMITTED SUBSEQUENT TO THE APPROVAL OF THIS DOCUMENT.

DEMOLITION KEYNOTES

NUMBER	KEYNOTE
100	REMOVE CONCRETE SIDEWALK TO THE NEAREST JOINT.
101	GRIND 8" CURB LINE.
102	REMOVE TREES AND TREE CLUSTERS
103	REMOVE EXISTING RESIDENTIAL HOUSE
104	REMOVE EXISTING BINS AND FOOTINGS
105	REMOVE ROCK DRIVE.
106	REMOVE CONCRETE PAVING AND ANY ROCK SUB-BASE UNDERNEATH THE PAVING.
107	REMOVE CONCRETE DRIVE ALONG WITH 2' STREET CURB AND GUTTER SECTION ADJOINING DRIVE. REPLACEMENT NOTED ON SHEETS C121 & 122.
108	REMOVE POWER POLES AND LINES. TO BE DONE BY OTHERS. TO BE REPLACED BY UNDERGROUND LINE IN NEW LOCATION. SEE C161)
109	REMOVE TELEPHONE SERVICE LINES AND STRUCTURES. TO BE DONE BY OTHERS.
110	REMOVE EXISTING GAS SERVICE LINES AND VALVES. TO BE DONE BY OTHERS.
111	REMOVE EXISTING STEPS.
112	REMOVE EXISTING RETAINING WALLS
113	REMOVE EXISTING GRAIN ELEVATOR BUILDINGS
114	REMOVE EXISTING WATER MAIN. TO BE REPLACED IN NEW LOCATION. (SEE C160)
115	REMOVE EXISTING FENCE.
116	REMOVE EXISTING BUILDING TO PARTY WALL.
117	REMOVE EXISTING MAILBOXES ASSOCIATED WITH PROPOSED PROPERTY. MAILBOXES FOR THE ADJOINING SIDE OF THE STREET ARE TO REMAIN AND BE PROTECTED DURING CONSTRUCTION.
118	REMOVE AND RELOCATE POWER POLE. TO BE DONE BY OTHERS. FOR NEW LOCATION OF POLE SEE C161)
119	PROTECT EXISTING FIRE HYDRANT AND WATER VALVES DURING CONSTRUCTION.
120	EXISTING HOOVER TRAIL EXTENSION. PROTECT DURING CONSTRUCTION.
121	PROTECT EXISTING ABOVEGROUND UTILITY FEATURES AND UTILITY MAINS DURING CONSTRUCTION.

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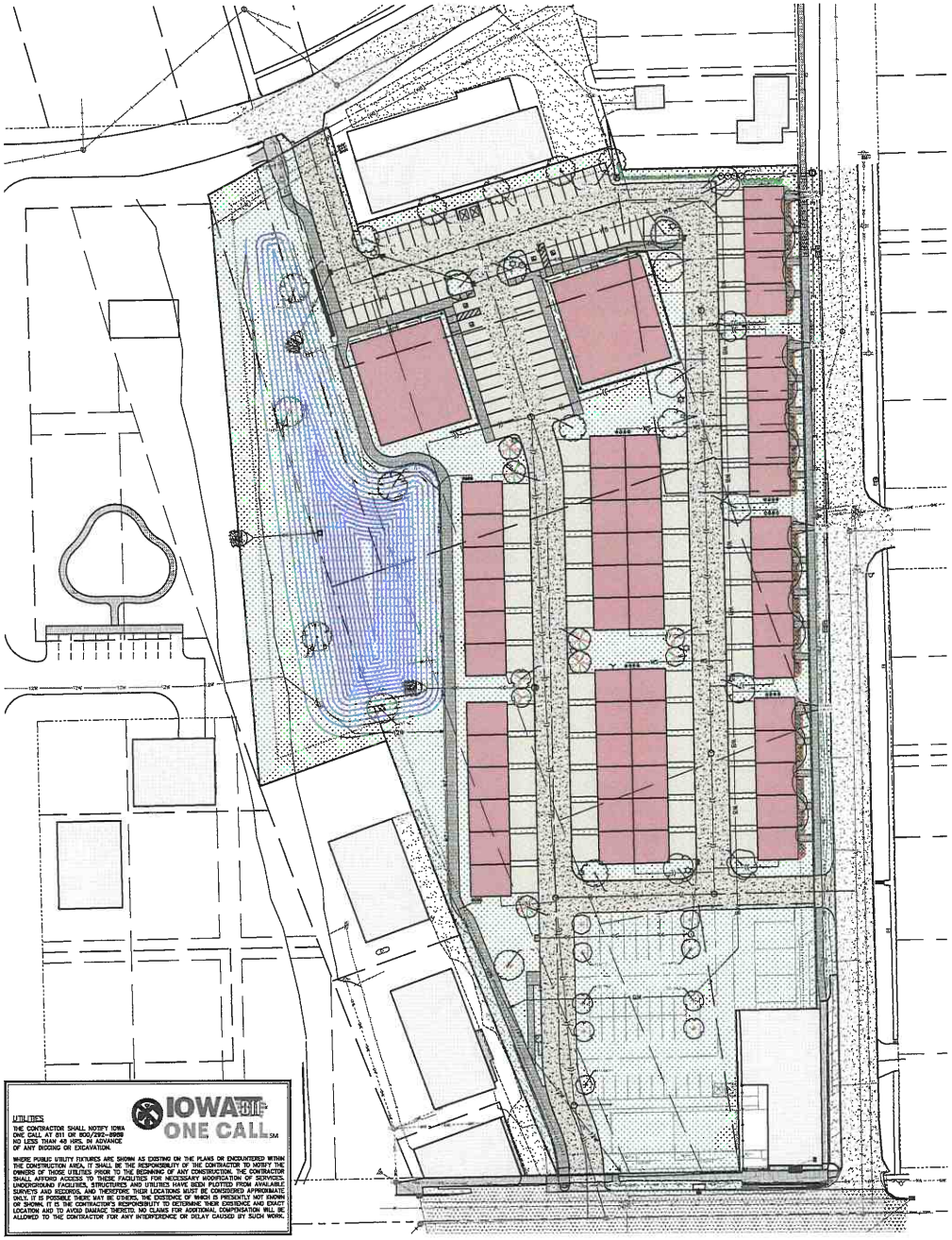
EXISTING FEATURES AND DEMOLITION PLAN

HERITAGE HILL, LOT 1
WEST BRANCH, CEDAR COUNTY, IOWA

MMS CONSULTANTS, INC.

Date:	08-04-22
Designed by: KLC	Field Book No: 1343, PG 39
Drawn by: TAV	Scale: 1"=40'
Checked by: KJB	Sheet No:
Project No: 11186-002	CD100



SITE PLAN
HERITAGE HILL - LOT 1
WEST BRANCH, IOWA

NORTH

GRAPHIC SCALE IN FEET 1"=40'

PLAT PREPARED BY:
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APPLICANT'S ATTORNEY:
JAMES D. HOUGHTON
316 STEVENS DRIVE
IOWA CITY, IA 52240

5.93 AC.

LANDSCAPE LEGEND

- TURF GRASS SOD

LANDSCAPE REQUIREMENTS

OPEN SPACE REQUIRED:
15% OF TOT REQUIRED SHALL BE OPEN SPACE
- 258,180 SF X 0.15 = 38,727 SF REQUIRED
(101,455 SF PROVIDED)

LANDSCAPING REQUIRED:
- 1 TREE / 1,000 SF OF REQUIRED OPEN SPACE
- 38,727 / 1,000 = 39 TREES

1 SHRUB PER 1,000 SF OF REQUIRED OPEN SPACE
- 38,727 / 1,000 = 39 SHRUBS

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	MINIMUM SIZE	CONTAINER	MATURE H x W
	AR	6	Acer rubrum 'Autumn Flame'	Autumn Flame Red Maple	2" Cal.	B&B	50 x 40
	BN	4	Betula nigra	River Birch	2" Cal.	B&B	40 x 40
	CC	5	Cercis canadensis	Eastern Redbud	1.5" Ca.	B&B	20 x 25
	GT	4	Gleditsia triacanthos inermis 'Shademaster' TM	Skyline Thornless Honey Locust	2" Cal.	B&B	35 x 25
	LT	4	Liriodendron tulipifera	Tulip Poplar	2" Cal.	B&B	60 x 30
	MP	2	Malus x 'Prairifire'	Prairifire Crabapple	1.5" Ca.	B&B	15 x 15
	QB	5	Quercus bicolor	Swamp White Oak	2" Cal.	B&B	50 x 50
	QR	4	Quercus rubra	Red Oak	2" Cal.	B&B	50 x 50
	SR	2	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	1.5" Ca.	B&B	20 x 15

ALTERNATE TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	MIN. CAL. SIZE	CONTAINER	MATURE H x W
	MP2	5	Malus x 'Prairifire'	Prairifire Crabapple	1.5" Ca.	B&B	15 x 15
	SR2	4	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	1.5" Ca.	B&B	20 x 15

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	MINIMUM SIZE	CONTAINER	MATURE H x W
	CA	27	Calamagrostis x acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass	24" Ht.	Container	4 x 2.5
	MS	19	Miscanthus sinensis 'Gracillimus'	Eulalia Grass	12" Ht.	Container	4 x 4
	PV	72	Panicum virgatum 'Prairie Fire'	Prairie Fire Switch Grass	24" Ht.	Container	4 x 3
	TM	6	Taxus x media 'Densiformis'	Dwarf Yew	24" Ht.	Container	3 x 5
	TO	33	Thuja occidentalis 'Pyramidalis' TM	Pyramidal Arborvitae	30" Ht.	Container	6 x 2.5

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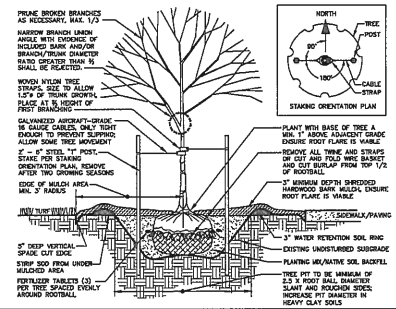
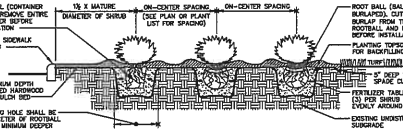
TYPICAL TREE PLANTING DETAIL
N.T.S.



SHRUB PLANTING DETAIL (DECIDUOUS AND EVERGREEN)
N.T.S.



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LANDSCAPE PLAN

HERITAGE HILL, LOT 1
WEST BRANCH, CEDAR COUNTY, IOWA

MMS CONSULTANTS, INC.

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