

TOPOGRAPHIC LEGEND

- FOUND MONUMENT
- BENCHMARK
- EXISTING SANITARY SEWER MANHOLE
- EXISTING SANITARY CLEANOUT
- EXISTING STORM SEWER MANHOLE
- PROPOSED STORM SEWER MANHOLE
- EXISTING CURB INTAKE
- PROPOSED CURB INTAKE
- EXISTING BEEHIVE INTAKE
- EXISTING FLARED END SECTION
- PROPOSED FLARED END SECTION
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- EXISTING UTILITY POLE
- EXISTING LAMPPARE
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- PROPOSED LOW PRESSURE GAS LINE
- FILTER SOCK
- BUILDING LIMITS
- STEEL BEAM GUARDRAIL
- FINISHED FLOOR ELEVATION
- CRITICAL CROSSING
- PROPOSED PCC PAVEMENT
- PROPOSED GRAVEL SHOULDER
- PROPOSED PAVEMENT REPLACEMENT (MATCH EXISTING PAVEMENT SECTION)

NO.	REVISION	DATE
A	ADDENDUM #2	01-22-15
B	CHANGE ORDER #1	05-13-15
C	CHANGE ORDER #3	11-15-15
D	CHANGE ORDER #4	03-22-16

DESIGNED: KJ	PROJECT NO.: 056.001
DRAFTED: BAY	FILE NUMBER: 056.001
CHECKED: LTL	SHEET NO.: C100
SCALE: 1/50	DATE: January 9, 2015

MRS. CLARK'S BUILDING ADDITION
740 SE DALBY DRIVE
ANKENY, IOWA 50021
DEMOLITION PLAN

LT LEON ASSOCIATES INC
 500 EAST LUDIST STREET, SUITE 400
 DES MOINES, IOWA 50319
 office: 515-472-7015
 www.ltleon.com

PROJECT NO. 056.001
 DEMOLITION PLAN
 SHEET NO.
C100

GENERAL DEMO NOTES

- PRIOR TO ANY EXCAVATION AT THE SITE, THE CONTRACTOR SHALL REVIEW ALL APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER AND ARCHITECT/ENGINEER. THE CONTRACTOR SHALL CONSULT WITH OWNERS PERSONNEL AND UTILITY COMPANY'S REPRESENTATIVES TO DETERMINE POSSIBLE UTILITY LOCATIONS AND DEPTHS. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE RESULTING FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
- FIELD VERIFY EXISTING GRADES AND LOCATIONS OF EXISTING UTILITIES, CONDUIT, LINES, POLES, TREES, PAVING, BUILDING AND OTHER SITE STRUCTURES PRIOR TO DEMOLITION OR CONSTRUCTION AND IMMEDIATELY INFORM OWNER OF ANY DISCREPANCIES.
- ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
- ALL NEW CONSTRUCTION SHALL COMPLY WITH THE CURRENT STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) AND SUBSEQUENT REVISIONS, AND THE CITY OF ANKENY SUDAS SUPPLEMENTAL SPECIFICATIONS.
- THIS SITE SHALL BE MAINTAINED IN COMPLIANCE WITH ALL CITY CODE APPLICABLE ON DATE OF SITE PLAN APPROVAL.
- ALL DEBRIS SPILLED ON PUBLIC R.O.W. OR ADJACENT PROPERTY SHALL BE CLEANED UP BY THE CONTRACTOR AT THE END OF EACH WORK DAY.
- ALL CONSTRUCTION FENCING SHALL BE INSTALLED PRIOR TO ANY ACTIVITY ON SITE.
- LEGALLY DISPOSE OF ALL DEMOLISHED ITEMS OFF SITE.
- CONTRACTOR TO CONSULT WITH OWNER ON: STORAGE LOCATION OF MATERIALS, WORK AREA, CONSTRUCTION FENCING, JOB OFFICE AND EMPLOYEE PARKING.
- CONTRACTOR SHALL COORDINATE REMOVAL AND RELOCATION OF ALL TELEPHONE, CABLE, FIBER, GAS, AND ELECTRICAL UTILITIES WITH THE OWNER OF EACH RESPECTIVE UTILITY.
- ALL REMOVALS AND REPLACEMENTS OF STREET PAVEMENT SHALL BE COMPLETED PER SUDAS STANDARDS AND SPECIFICATIONS.

KEYED NOTES

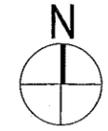
- EXISTING BUILDING WALLS HAVE BEEN REMOVED BY OTHERS. CONTRACTOR TO REMOVE EX. BUILDING FOUNDATION AND SLAB.
- REMOVE EXISTING PAVEMENT. EXISTING PAVEMENT MAY BE BROKEN UP WITH GRASS IN AREAS, AND MAY NOT COMPLETELY COVER ENTIRE HATCHED REGION.
- REMOVE EXISTING GRAVEL. EXISTING GRAVEL MAY BE SPARSE AND MAY NOT COMPLETELY COVER ENTIRE HATCHED REGION.
- REMOVE EXISTING UTILITY STRUCTURE.
- REMOVE EXISTING UTILITY PIPE.
- EXISTING GAS MAIN WAS REMOVED AND CAPPED BY OTHERS DURING BUILDING DEMOLITION. CONTRACTOR TO VERIFY.
- EXISTING WATERMAIN WAS REMOVED AND CAPPED AT THE CORPORATION VALVE BY OTHERS DURING BUILDING DEMOLITION.
- EXISTING WATERMAIN, GAS MAIN, AND UNDERGROUND ELECTRIC MAY NEED TO BE REMOVED AND LOWERED. COORDINATE WITH UTILITY OWNERS. SEE UTILITY PLAN.
- REMOVE EXISTING FENCE.
- REMOVE EXISTING ABANDONED TELEPHONE SERVICE FROM BELOW PROPOSED BUILDING FOOTPRINT. REMOVE OR ABANDON REMAINDER OF EXISTING TELEPHONE SERVICE.
- REMOVE AND REPLACE EXISTING PCC PAVEMENT FOR PROPOSED STORM SEWER. SEE UTILITY PLAN.
- GRIND CURB FOR NEW WALK.

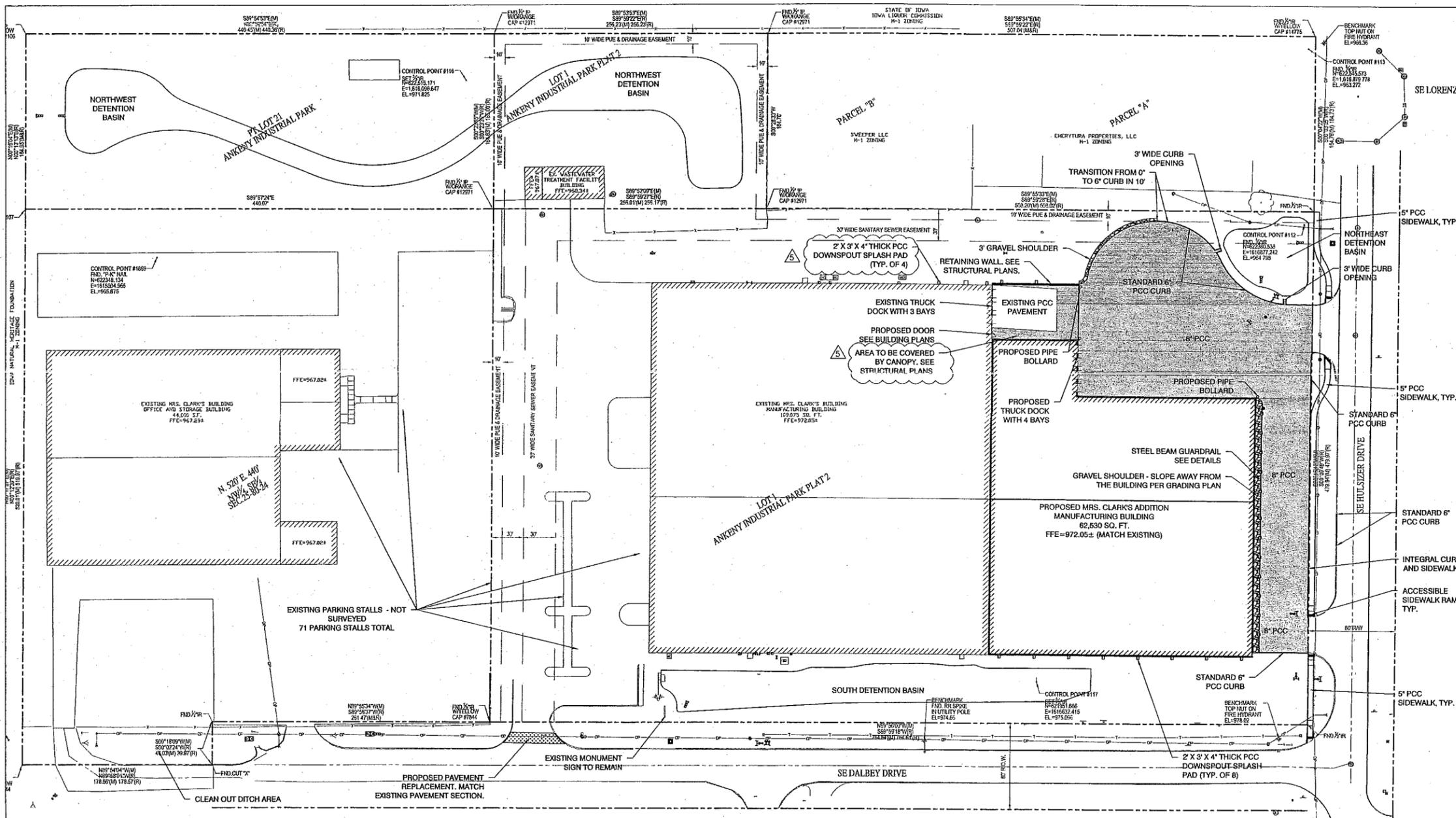
PROTECT ITEMS

- A** REMOVE EXISTING FIRE HYDRANT AND RELOCATE PER UTILITY PLAN.
- B** PROTECT EXISTING UTILITIES, AND PIPING.
- C** EXISTING POWER POLE TO REMAIN. PROTECT DURING CONSTRUCTION.
- D** STRIP, STOCKPILE AND REUSE GRAVEL.
- E** PROTECT EXISTING BUILDING.
- F** REMOVE EXISTING MAILBOXES AS NEEDED DURING CONSTRUCTION AND REPLACE IN EXISTING LOCATION.
- G** PROTECT EXISTING CURB DURING STORM SEWER INSTALLATION.

DEMO LEGEND

- REMOVE ITEM
- REMOVE ITEM
- KEYED NOTE
- PROTECT ITEM NOTE
- REMOVE HMA PAVEMENT, PCC PAVEMENT, CURB AND GUTTER
- REMOVE GRAVEL
- REMOVE EXISTING BUILDING
- STRIP, STOCKPILE AND REUSE GRAVEL





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- PST - PROPOSED STORM SEWER LINE
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- OP - EXISTING OVERHEAD ELECTRIC LINE
- E - EXISTING UNDERGROUND ELECTRIC LINE
- T - EXISTING UNDERGROUND TELEPHONE LINE
- FO - EXISTING FIBER OPTICS LINE
- HG - EXISTING HIGH PRESSURE GAS LINE
- G - EXISTING LOW PRESSURE GAS LINE
- PROPOSED LOW PRESSURE GAS LINE
- FILTER SOCK
- BUILDING LIMITS
- STEEL BEAM GUARDRAIL
- FFE - FINISHED FLOOR ELEVATION
- CC - CRITICAL CROSSING
- PROPOSED PCC PAVEMENT
- PROPOSED GRAVEL SHOULDER
- PROPOSED PAVEMENT REPLACEMENT (MATCH EXISTING PAVEMENT SECTION)

NO.	REVISION	DATE
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2	CHANGE ORDER #2	11-16-15
3	CHANGE ORDER #3	03-22-16

DESIGNED: KLJ
 DRAFTED: BAY
 CHECKED: LTL
 SCALE: 1/8" = 1'-0"

MRS. CLARK'S BUILDING ADDITION
 740 SE DALBEY DRIVE
 ANKENY, IOWA 50021
 SITE LAYOUT PLAN

LT LEON ASSOCIATES INC.
 500 EAST LOCUST STREET SUITE 400
 DES MOINES, IOWA 50309
 OFFICE: 515-422-7016
 WWW.LTLEON.COM

PROJECT NO. 056.001
 SHEET NO. C101

OWNER
 MCF REALTY LLC
 MK FUND
 2009 BUTTERFIELD ROAD, SUITE 600
 DOWNERS GROVE, IL 60515
 CONTACT: JERRY VAN DER KAMP
 (515) 299-6475

APPLICANT
 MRS. CLARK'S FOODS
 740 SE DALBEY DRIVE
 ANKENY, IA 50021
 CONTACT: JERRY VAN DER KAMP
 (515) 299-6475

STRUCTURAL ENGINEER/MEP
 BROWN ENGINEERING COMPANY
 5525 MEREDITH DRIVE, SUITE D
 DES MOINES, IA 50310
 CONTACT: MARK DAVID, P.E.
 (515) 331-1825

CIVIL ENGINEER
 LT LEON ASSOCIATES, INC.
 500 E LOCUST STREET, SUITE 400
 DES MOINES, IA 50309
 CONTACT: LUIS LEON, P.E.
 (515) 422-7016

ZONING
 LIGHT INDUSTRIAL DISTRICT (M-1)

SURROUNDING ZONING
 NORTH: LIGHT INDUSTRIAL DISTRICT (M-1)
 SOUTH: LIGHT INDUSTRIAL DISTRICT (M-1)
 EAST: LIGHT INDUSTRIAL DISTRICT (M-1)
 WEST: LIGHT INDUSTRIAL DISTRICT (M-1)

PROJECT USE
 OFFICE/PROCESSING/WAREHOUSE-LIGHT INDUSTRIAL DISTRICT (M-1)

SITE SUMMARY
 LOT 21: 72,851 SQ. FT. (1.67 ACRES)
 NORTH PARCEL OF LOT 1: 42,182 SQ. FT. (0.97 ACRES)
 SOUTH PARCEL OF LOT 1: 366,945 SQ. FT. (8.42 ACRES)
 TOTAL SITE AREA: 481,878 SQ. FT. (11.06 ACRES)

EXISTING PAVEMENT AREA: 75,379 SQ. FT.
 EXISTING GRAVEL AREA: 51,491 SQ. FT.
 EXISTING BUILDING AREA: 111,391 SQ. FT.
 TOTAL EXISTING IMPERVIOUS AREA: 238,261 SQ. FT. (49.5%)
 PROPOSED PAVEMENT AREA: 105,482 SQ. FT.
 PROPOSED GRAVEL AREA: 1,748 SQ. FT.
 PROPOSED BUILDING AREA: 173,923 SQ. FT.
 TOTAL PROPOSED IMPERVIOUS AREA: 282,044 SQ. FT. (58.6%)
 OPEN SPACE EXISTING: 243,417 SQ. FT. (50.5%)
 OPEN SPACE REQUIRED: 96,336 SQ. FT. (20.0%)
 OPEN SPACE PROVIDED: 199,634 SQ. FT. (41.4%)

THE PARCEL DESCRIBED AS N. 520' E. 440' (218,440 SQ. FT., 5.01 ACRES), WHICH CONTAINS THE EXISTING MRS. CLARK'S OFFICE BUILDING, WILL NOT BE DISTURBED DURING PROPOSED IMPROVEMENTS AND IS NOT INCLUDED IN ABOVE CALCULATIONS.

SETBACK REQUIREMENTS
 FRONT YARD: 50 FEET
 SIDE YARD: NONE REQUIRED, EXCEPT WHEN ADJACENT TO ANY RESIDENTIAL DISTRICT OR STREET RIGHT-OF-WAY, IN WHICH CASE - 50 FEET.
 REAR YARD: 40 FEET

BUILDING SUMMARY
 EXISTING OFFICE & STORAGE BUILDING AREA: 44,000 SQ. FT.
 EXISTING WASTEWATER TREATMENT FACILITY BUILDING AREA: 2,316 SQ. FT.
 EXISTING MANUFACTURING BUILDING AREA: 109,075 SQ. FT.
 PROPOSED MANUFACTURING ADDITION AREA: 63,443 SQ. FT.

PARKING REQUIREMENTS
 REQUIREMENT: 1 SPACE PER 400 SQ. FT. OF OFFICE SPACE + GREATER OF THE PROCESS SHIFT OR WAREHOUSE SPACE
 EXISTING OFFICE SPACE: 12,000 SQ. FT. DIVIDED BY 400 = 30 STALLS
 EXISTING PROCESS: 36 EMPLOYEES (MAX SHIFT) DIVIDED BY 2 = 18 STALLS
 EXISTING AND PROPOSED WAREHOUSE SPACE: 171,605 SQ. FT. DIVIDED BY 5000 = 35 STALLS
 TOTAL STALLS REQUIRED: 65 STALLS
 TOTAL STALLS PROVIDED: 71 STALLS
 PARKING SETBACK: 5' FROM ANY ESTABLISHED RIGHT-OF-WAY, ALLEY OR PROPERTY LINE.

BENCHMARKS
 BENCHMARK #100
 FOUND CUT "X" ON TOP NUT ON FIRE HYDRANT IN NW QUADRANT OF INTERSECTION OF SE HULSIZER AND SE LORENZ. ELEVATION=966.30

BENCHMARK #102
 USED TOP NUT ON FIRE HYDRANT IN NW QUADRANT OF INTERSECTION OF SE HULSIZER AND SE DALBEY DRIVE. ELEVATION=978.02

BENCHMARK #500
 FOUND RAILROAD SPIKE IN UTILITY POLE ON NORTH SIDE OF SE DALBEY DRIVE AT SE CORNER OF MRS. CLARK'S MAIN PROCESSING BUILDING. ELEVATION=974.66

BENCHMARK #501
 FOUND RAILROAD SPIKE IN UTILITY POLE ON NORTH SIDE OF PAVED PORTION OF SE DALBEY DRIVE. ELEVATION=967.91

BENCHMARK #502
 NORTH RIM OF SANITARY SEWER MANHOLE AT NORTH LOADING DOCK AREA OF MRS. CLARKS, SOUTH OF TANK STORAGE BUILDING. ELEVATION=967.00

PARCEL NUMBER
 00097-025-036, DISTRICT 1B1
 00161-034-000, DISTRICT 1B1

LEGAL DESCRIPTION
 LEGAL DESCRIPTION: AS SHOWN ON BOOK 14532, PAGE 96 OF THE POLK COUNTY RECORDERS OFFICE.

LOT 1 IN ANKENY INDUSTRIAL PARK PLAT 2, AN OFFICIAL PLAT, NOW INCLUDED IN AND FORMING A PART OF THE CITY OF ANKENY, POLK COUNTY, IOWA AND

LOT 21, EXCEPT THE EAST 805.28 FEET, IN ANKENY INDUSTRIAL PARK, AN OFFICIAL PLAT; AND THE NORTH 520.0 FEET OF THE SOUTH 631.76 FEET OF THE EAST 440.0 FEET OF THE WEST 515.0 FEET OF THE NW 1/4 OF THE SE 1/4 OF SECTION 25, TOWNSHIP 80 NORTH, RANGE 24 WEST OF THE 5TH P.M., EXCEPT THAT PART THEREOF CONVEYED TO THE CITY OF ANKENY BY QUIT CLAIM DEED RECORDED IN BOOK 5795, PAGE 562; ALL INCLUDED IN AND FORMING A PART OF THE CITY OF ANKENY, POLK COUNTY, IOWA.

THE ABOVE PARCEL ALSO BEING DESCRIBED AS FOLLOWS:
 LOT 21, EXCEPT THE EAST 805.28 FEET IN ANKENY INDUSTRIAL PARK, AN OFFICIAL PLAT, AND EXCEPT BEGINNING AT THE SE CORNER; THENCE WEST 261.32 FEET; THENCE NORTH 40 FEET; THENCE EAST 261.47 FEET; THENCE SOUTH 40 FEET TO THE POINT OF BEGINNING OF THE NORTH 520 FEET OF THE SOUTH 631.76 FEET OF THE EAST 440.0 FEET OF THE WEST 515.0 FEET OF THE NW 1/4 OF THE SE 1/4 OF SECTION 25, TOWNSHIP 80 NORTH, RANGE 24 WEST OF THE 5TH P.M., NOW INCLUDED IN AND FORMING A PART OF THE CITY OF ANKENY, POLK COUNTY, IOWA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:
 BEGINNING AT THE NW CORNER OF LOT 1 OF ANKENY INDUSTRIAL PARK PLAT 2, AN OFFICIAL PLAT, NOW INCLUDED IN AND FORMING A PART OF THE CITY OF ANKENY, POLK COUNTY, IOWA; THENCE S00°09'52"W ALONG THE WEST LINE OF SAID LOT 1, 165.00 FEET TO A POINT; THENCE CONTINUING ALONG THE WEST LINE OF SAID LOT 1, S00°10'01"W, 480.00 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SE DALBEY; THENCE S90°00'00"W ALONG SAID NORTH RIGHT-OF-WAY LINE, 261.47 FEET, ALSO BEING THE END OF SAID RIGHT-OF-WAY; THENCE S00°00'00"W, 40.00 FEET TO A POINT; THENCE S90°00'00"W, 178.68 FEET TO A POINT; THENCE N00°13'16"E, 520.00 FEET TO THE SW CORNER OF SAID LOT 1, S00°10'01"W, 480.00 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID LOT 1, 439.84 FEET TO THE POINT OF BEGINNING; CONTAINING 6.68 ACRES MORE OR LESS.

ALL SUBJECT TO THE PERMITTED EXCEPTIONS LISTED ON THE ATTACHED TWO PAGES, EXHIBIT "B".

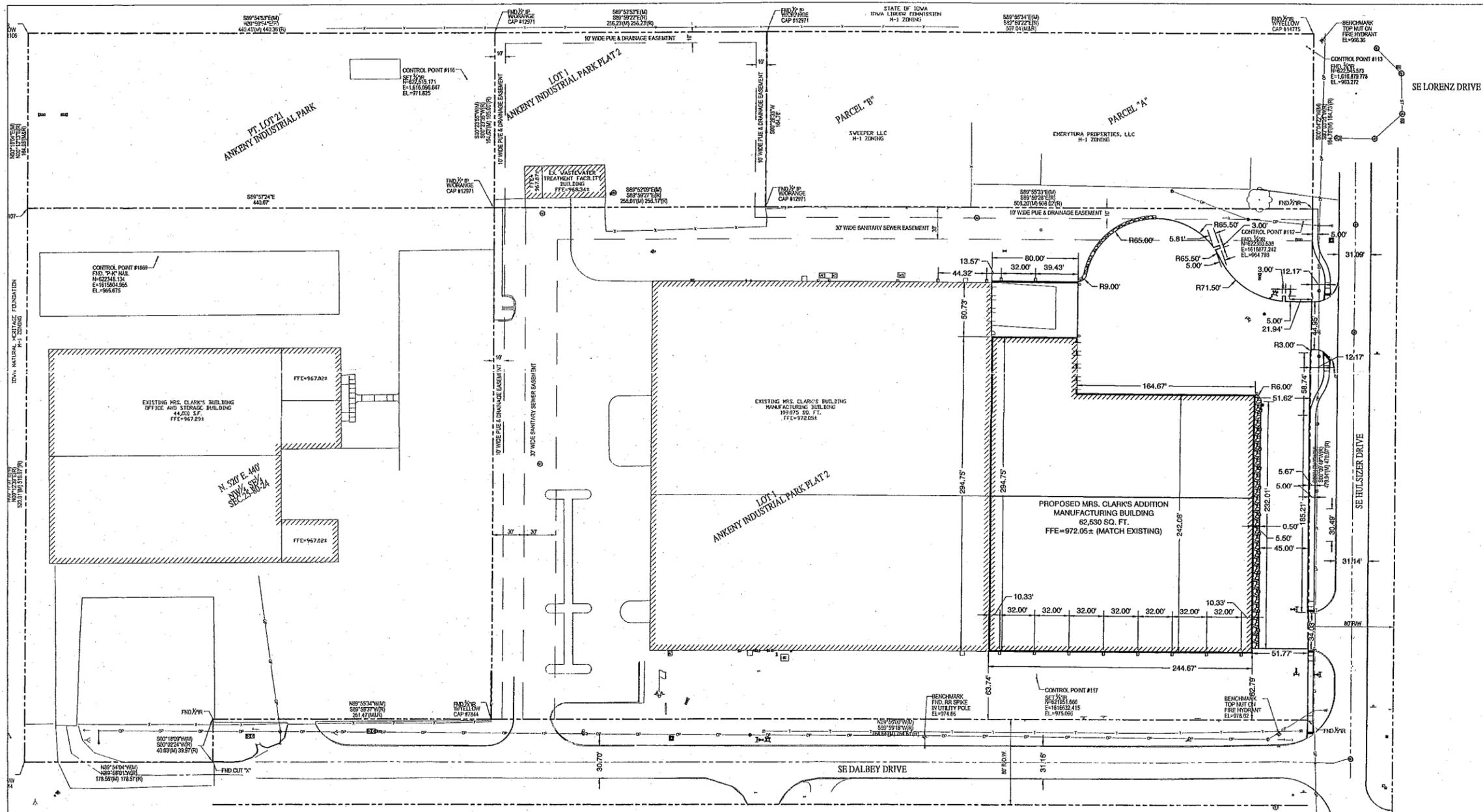
GENERAL SITE PLAN NOTES

- PRIOR TO ANY EXCAVATION AT THE SITE, THE CONTRACTOR SHALL REVIEW ALL APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER AND ARCHITECT/ENGINEER. THE CONTRACTOR SHALL CONSULT WITH OWNERS PERSONNEL AND UTILITY COMPANYS REPRESENTATIVES TO DETERMINE POSSIBLE UTILITY LOCATIONS AND DEPTHS. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE RESULTING FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
- FIELD VERIFY EXISTING GRADES AND LOCATIONS OF EXISTING UTILITIES, CONDUIT, LINES, POLES, TREES, PAVING, BUILDING AND OTHER SITE STRUCTURES PRIOR TO DEMOLITION OR CONSTRUCTION AND IMMEDIATELY INFORM OWNER OF ANY DISCREPANCIES. EXISTING UTILITIES HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND OTHER RECORDS REVIEWED. THE ENGINEER AND/OR OWNER MAKE NO GUARANTEE THAT THE UTILITIES SHOWN ON THE PLAN COMPRISE ALL UTILITIES PRESENT, EITHER IN SERVICE OR ABANDONED. LOCATION OF UTILITIES PRIOR TO ANY EXCAVATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
- ALL NEW CONSTRUCTION SHALL COMPLY WITH THE CURRENT STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUBAS) AND SUBSEQUENT REVISIONS, AND THE CITY OF ANKENY SUDAS SUPPLEMENTAL SPECIFICATIONS.
- THIS SITE SHALL BE MAINTAINED IN COMPLIANCE WITH ALL CITY CODE APPLICABLE ON DATE OF SITE PLAN APPROVAL.
- THE REQUIRED LANDSCAPING, BOTH EXISTING AND PROPOSED, SHALL BE MAINTAINED FOR THE LIFE OF THE CERTIFICATE OF OCCUPANCY OR CERTIFICATE OF ZONING COMPLIANCE. ALL DISTURBED AREAS SHALL BE RESTORED BY SEEDING, UNLESS INDICATED OTHERWISE ON PLANS.
- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL WITHIN SE DALBEY DRIVE AND SE HULSIZER DRIVE AS NEEDED DURING CONSTRUCTION.

PRELIMINARY - NOT FOR CONSTRUCTION

GRAPHIC SCALE
 0 50 100 150

N



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NO.	REVISION	DATE
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2	CHANGE ORDER #3	11-16-15

DESIGNED: KJL
 DRAFTED: BAY
 CHECKED: LTL
 SCALE: 1/8" = 1'-0"

PROJECT NO.: 056.001
 FILE NUMBER: 056.001
 SHEET NO.: C102
 DATE: January 9, 2015

MRS. CLARK'S BUILDING ADDITION
740 SE DALBEY DRIVE
ANKENY, IOWA 50021
DIMENSION PLAN

LT LEON ASSOCIATES INC.
 office: 515-422-7016
 www.ltleon.com

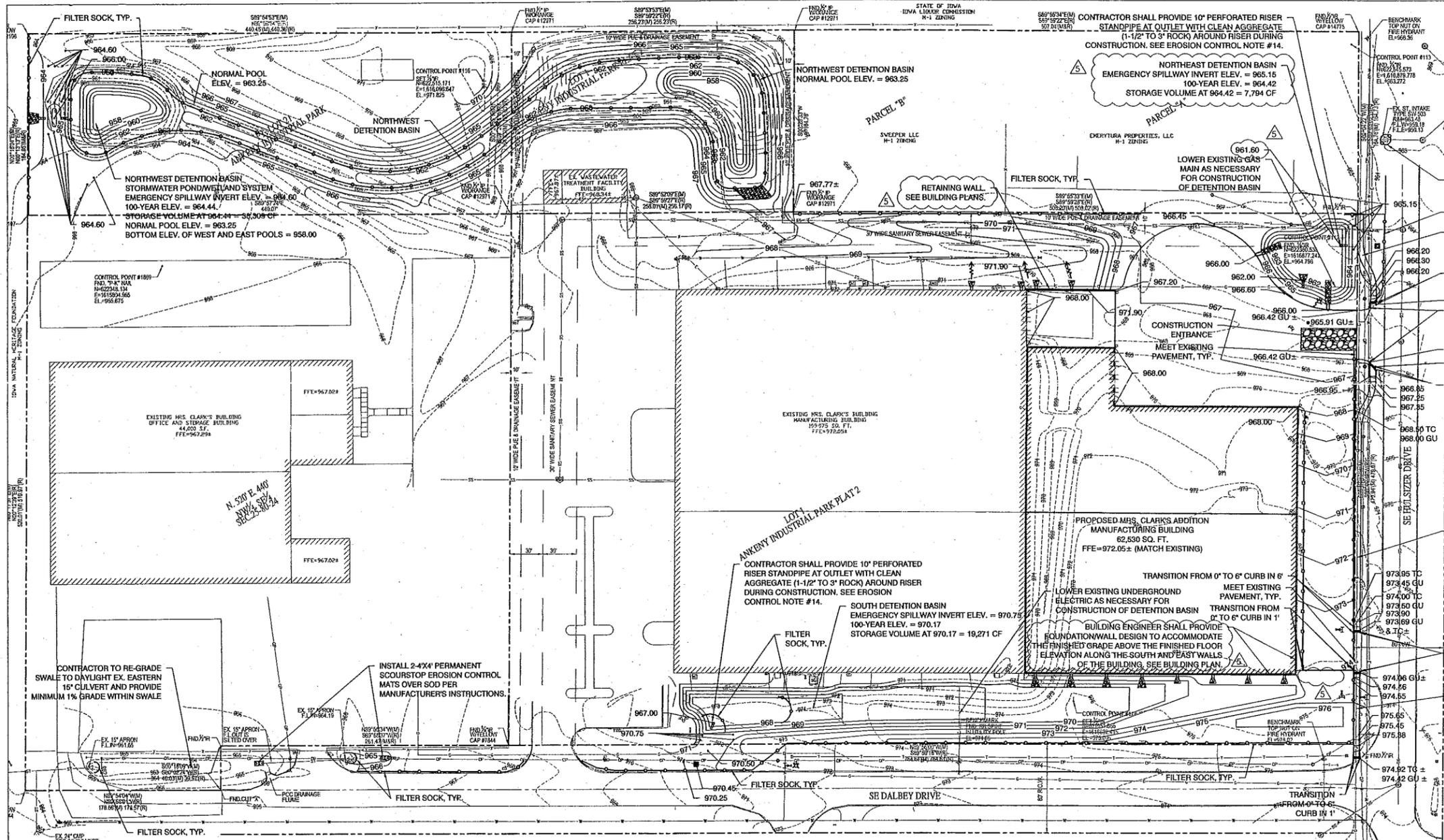
500 EAST LODGE STREET SUITE 400
 DES MOINES IOWA 50309

PROJECT NO. 056 001

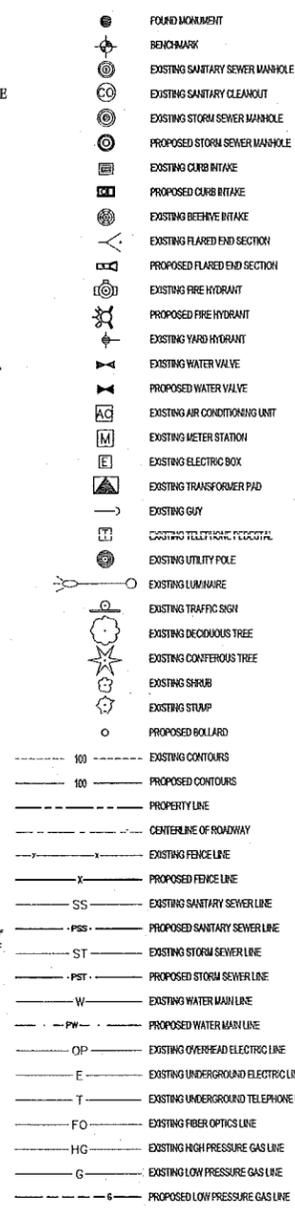
DIMENSION PLAN

SHEET NO.
C102





TOPOGRAPHIC LEGEND



NO.	REVISION	DATE
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2	CHANGE ORDER #2	05-29-15
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DESIGNED: KJ	PROJECT NO: 056.001
DRAWN: BAY	FILE NUMBER: 056.001
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SCALE: 1/8" = 1'-0"	DATE: January 9, 2015

MRS. CLARK'S BUILDING ADDITION
740 SE DALBEY DRIVE
ANKENY, IOWA 50021
GRADING AND EROSION CONTROL PLAN

LT LEON ASSOCIATES INC.
 500 EAST LOCUST STREET SUITE 400
 DES MOINES, IOWA 50309
 office 515-422-7016
 www.ltleon.com

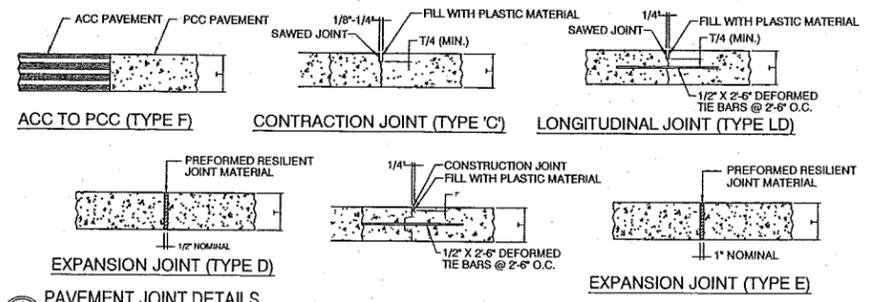
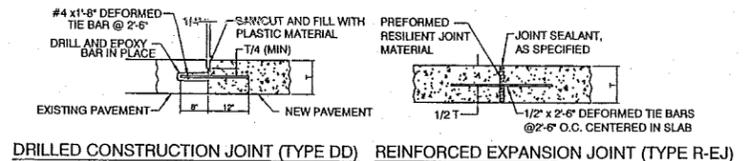
PROJECT NO 056 001
 GRADING AND EROSION CONTROL PLAN
 SHEET NO.
C104

- GENERAL GRADING NOTES**
- PRIOR TO ANY EXCAVATION AT THE SITE, THE CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER AND/OR ENGINEER, AND CONSULT WITH OWNERS PERSONNEL AND UTILITY COMPANYS REPRESENTATIVES TO DETERMINE POSSIBLE UTILITY LOCATIONS AND DEPTHS. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE RESULTING FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
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 - THE GRADING CONTRACTOR SHALL PROTECT ALL STRUCTURES AND UTILITIES AND VERIFY LOCATIONS. DAMAGE TO STRUCTURES AND UTILITIES SHALL BE REPAIRED BY THE GRADING CONTRACTOR AT THE GRADING CONTRACTORS EXPENSE TO THE SATISFACTION OF THE OWNER OF THE UTILITY.
 - ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THESE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
 - THE CONTRACTOR WILL HOLD THE OWNER HARMLESS FROM ANY AND ALL CLAIMS OF ANY TYPE WHATSOEVER RESULTING FROM DAMAGES TO ADJOINING PUBLIC OR PRIVATE PROPERTY, INCLUDING REASONABLE ATTORNEY FEES INCURRED TO THE OWNER, FURTHER, IF THE CONTRACTOR FAILS TO TAKE NECESSARY STEPS TO PROMPTLY REMOVE EARTH SEDIMENTATION OR DEBRIS WHICH COMES ONTO ADJOINING PUBLIC OR PRIVATE PROPERTY, THE OWNER MAY, BUT NEED NOT, REMOVE SUCH ITEMS AND DEDUCT THE COST THEREOF FROM THE AMOUNTS DUE TO THE CONTRACTOR.
 - CONTRACTOR SHALL HOLD OWNERS CONSULTANTS HARMLESS FROM ANY AND ALL CLAIMS RESULTING FROM DAMAGE.
 - ALL DEBRIS SPILLED ON THE PUBLIC R.O.W. OR ADJACENT PROPERTY SHALL BE CLEANED UP BY THE CONTRACTOR AT THE END OF EACH WORK DAY.
 - THE CONTRACTOR SHALL CHECK THE SITE PERIODICALLY SO AS NOT TO LEAVE OPEN EXCAVATIONS OR PROTRUDING OBJECTS WHICH MAY BE DANGEROUS.
 - ALL CONTRACTORS ARE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS TO COMPLETE THE WORK UNLESS OTHERWISE INDICATED.
 - REMOVE AND DISPOSE OF ALL UNSUITABLE EXCESS EXCAVATED SOIL, DEBRIS, AND OTHER DELETERIOUS MATERIALS.
 - ALL SPOT ELEVATIONS ARE AT THE TOP OF FINISHED SURFACES.
 - ALL TURF AND PAVEMENT SHALL BE DRAIN COMPLETELY AND SHALL NOT POND OR PUDDLE.
 - THE CONTRACTOR IS RESPONSIBLE FOR IMPORTING/EXPORTING OF EARTH TO MEET DESIGN GRADES.
 - CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN EROSION CONTROL UNTIL ESTABLISHMENT OF PERMANENT GROUND COVER OR PAVING.
 - ALL DISTURBED AREAS SHALL BE RESTORED BY SEEDING OR SODDING, UNLESS NOTED OTHERWISE ON THE PLANS.
 - ALL ACCESSIBLE ROUTES ON SITE AND ALONG PUBLIC SIDEWALKS SHALL BE A MAXIMUM CROSS SLOPE OF 2%.

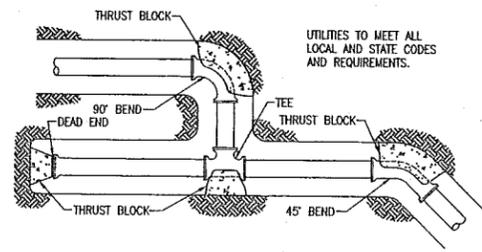
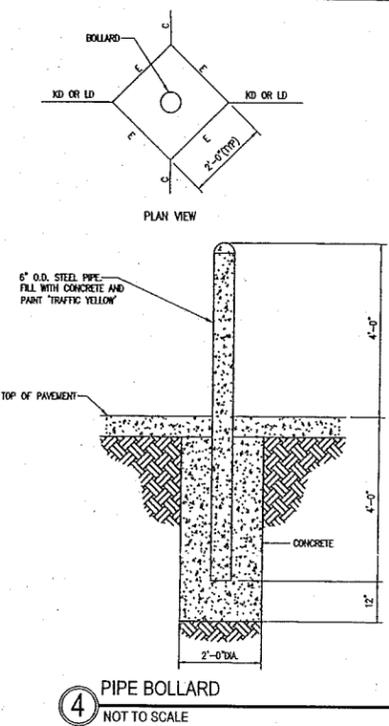
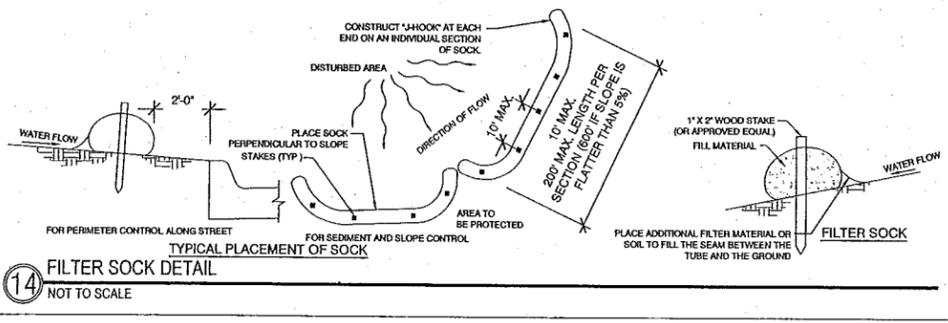
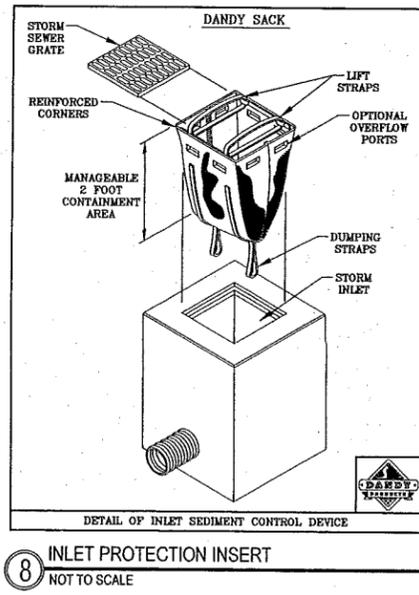
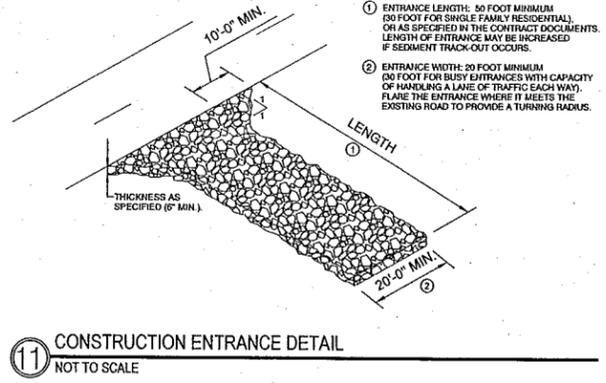
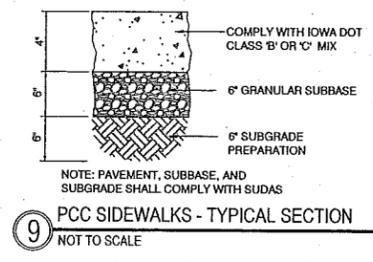
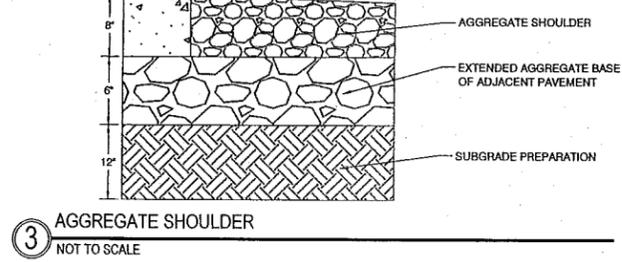
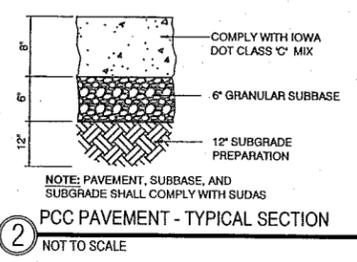
- GENERAL EROSION CONTROL NOTES**
- DISTURB THE LEAST AREA POSSIBLE TO COMPLETE THE SCOPE OF THE PROJECT.
 - ALL SEDIMENT AND EROSION CONTROL PRACTICES WILL BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS BY RESPONSIBLE PERSONNEL. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE BEST MANAGEMENT PRACTICES SHALL BE MADE IMMEDIATELY. INSPECTIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
 - SOIL STABILIZATION WILL BE INITIATED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITY WILL NOT OCCUR FOR A PERIOD OF MORE THAN 21 CALENDAR DAYS BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED. THIS SEQUENCE SHALL REPEAT AS GROUND COVER IS REMOVED BY SUBSEQUENT CONSTRUCTION ACTIVITY. ALL LANDSCAPED AREAS SHALL RECEIVE AT LEAST 4" OF TOPSOIL.
 - GENERAL CONTRACTOR SHALL IMPLEMENT ALL EROSION CONTROL ACTIVITY WITH THE ASSISTANCE OF THE UTILITY SUBCONTRACTORS, BUILDING CONTRACTORS AND SUPPLIERS.
 - APPLY FREQUENT LIGHT WATERING TO GROUND SURFACE, AS REQUIRED TO CONTROL DUST.
 - UPON COMPLETION AT CONSTRUCTION, SEED ALL DISTURBED AREAS PER PROJECT SPECIFICATIONS.
 - MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES IS THE RESPONSIBILITY OF THE CONTRACTOR AND/OR SUBCONTRACTORS. CLEANING OF CONTROL DEVICES SHALL BEGIN WHEN THEY HAVE LOST 50% OF THEIR CAPACITY.
 - LOCATION OF SOLID WASTE CONTAINER AND PORTABLE RESTROOM TO BE SPECIFIED BY CONTRACTOR AND APPROVED BY OWNER.
 - WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND DISTURBING ACTIVITIES.
 - ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE IMPLEMENTING AGENCY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENT.
 - THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THE IOWA DEPARTMENT OF NATURAL RESOURCES GENERAL NPDES PERMIT NO. 2 AND MAINTAIN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
 - PRIOR TO ANY LAND DISTURBING ACTIVITIES, CONTRACTOR IS REQUIRED TO INSTALL ALL EROSION CONTROL MEASURES AND THE EROSION CONTROL MEASURES MUST BE INSPECTED AND APPROVED BY THE CITY OF ANKENY ENFORCEMENT OFFICER.
 - FOR EROSION CONTROL DETAILS, SEE CONSTRUCTION DETAIL SHEET C105.
 - ACCUMULATED SEDIMENT WITHIN THE DETENTION BASINS WILL BE REQUIRED TO BE CLEANED OUT AND GRADES RETURNED TO MEET FINAL DESIGN GRADES PRIOR TO FINAL APPROVAL. THE 10" RISER STANDPIPES AT THE SOUTH DETENTION BASIN OUTLET AND THE NORTHEAST DETENTION BASIN OUTLET CAN BE REMOVED AFTER THE UPSTREAM AREAS HAVE BEEN STABILIZED WITH 70% VEGETATION.
 - A CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL (COSESCO) PERMIT WILL NEED TO BE OBTAINED FROM THE CITY OF ANKENY. THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING THE PERMIT. THE PERIMETER EROSION CONTROL MEASURES MUST BE IN PLACE, INSPECTED BY AND ACCEPTABLE TO THE CITY ENFORCEMENT OFFICER PRIOR TO ANY LAND DISTURBING ACTIVITIES, NOT TO EXCEED ONE (1) DAY FROM THE BEGINNING OF LAND DISTURBING ACTIVITIES.

AREA TO BE DISTURBED = 6.00 ACRES
 APPLICANT:
 MRS. CLARK'S FOODS
 740 SE DALBY DRIVE
 ANKENY, IA 50021





1 PAVEMENT JOINT DETAILS
NOT TO SCALE

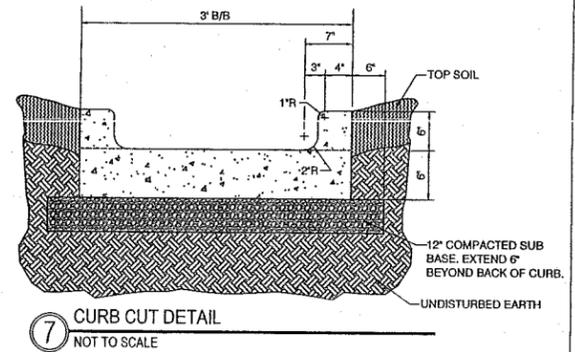
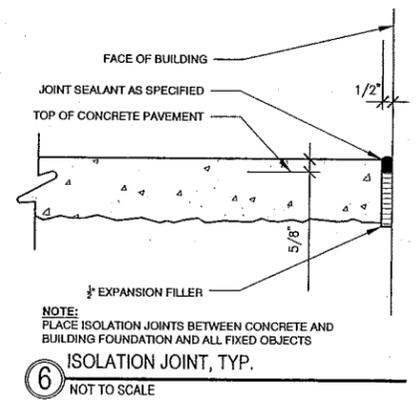


SIZE OF THRUST BLOCK, SQUARE FEET OF BEARING AREA AGAINST UNDISTURBED EARTH:

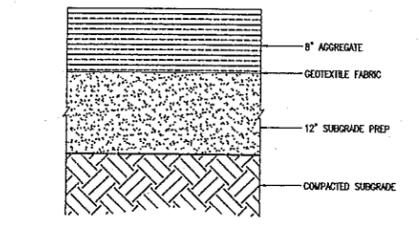
PIPE SIZE	DEAD END OR TEE	90° BEND	45° BEND	11-1/2" OR 22-1/2" BEND
4"	1.0	1.3	0.8	0.5
6"	2.2	3.0	1.6	0.9
8"	3.8	5.3	2.9	1.5
10"	6.0	8.4	4.5	2.3
12"	8.5	12.1	6.5	3.3
14"	11.6	16.4	8.9	4.5
16"	15.2	21.4	11.6	5.9

BASED ON 150 PSI TEST PRESSURE AND 2000 PSF SOIL BEARING.

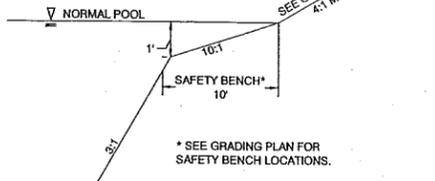
5 THRUST BLOCKS
NOT TO SCALE



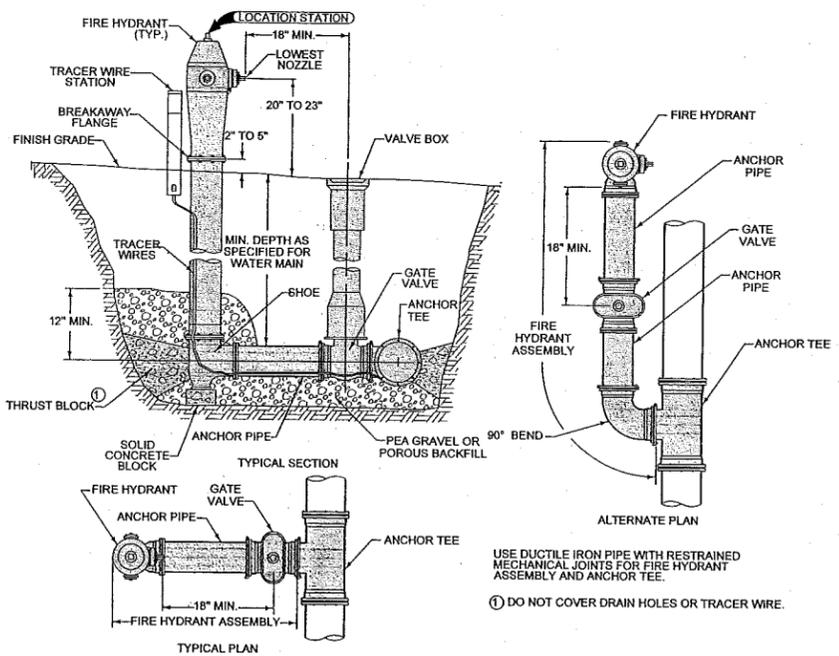
7 CURB AND GUTTER DETAIL
NOT TO SCALE



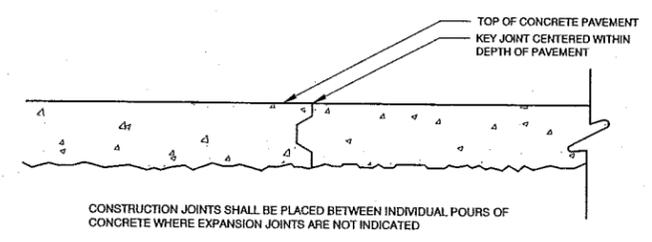
10 GRAVEL SECTION
NOT TO SCALE



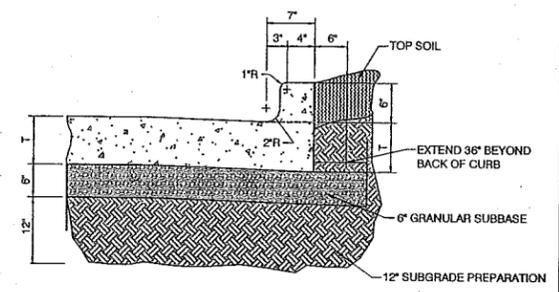
12 SAFETY BENCH DETAIL
NOT TO SCALE



13 FIRE HYDRANT ASSEMBLY
NOT TO SCALE



15 CONSTRUCTION JOINT, TYP.
NOT TO SCALE



16 CURB AND GUTTER DETAIL
NOT TO SCALE

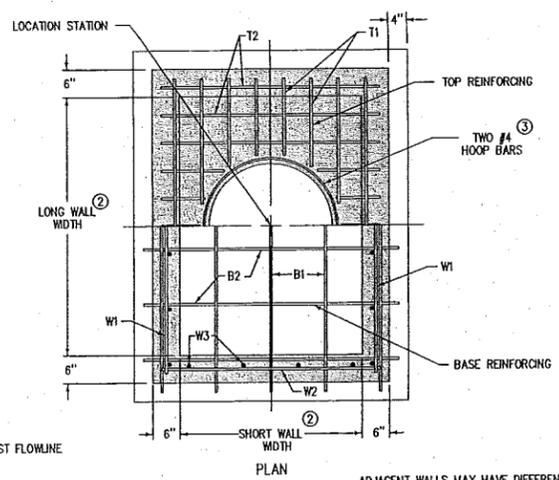
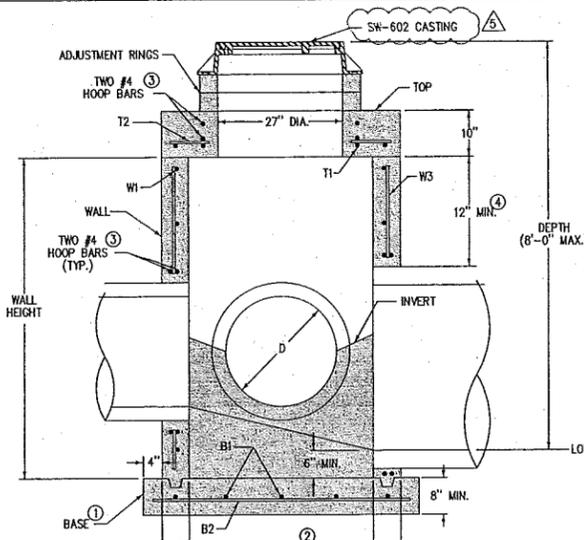
DATE: 05-13-15
 BY: KJL
 REVISION: CHANGE ORDER #1
 NO. 1
 DATE: 05-28-15
 BY: LTL
 REVISION: CHANGE ORDER #2
 NO. 2
 DATE: 11-18-15
 BY: LTL
 REVISION: CHANGE ORDER #3
 NO. 3

PROJECT NO.: 056.001
 FILE NUMBER: 056.001
 DESIGNED: KJL
 DRAFTED: BAY
 CHECKED: LTL
 SCALE: N/A
 DATE: January 9, 2015

MRS. CLARK'S BUILDING ADDITION
 740 SE DALEBY DRIVE
 ANKENY, IOWA 50021
 CIVIL DETAILS

LT LEON ASSOCIATES INC.
 505 EAST LOCUST STREET SUITE 400
 DES MOINES IOWA 50309
 515-472-7015
 www.ltleon.com

PROJECT NO. 056.001
 CIVIL DETAILS
 SHEET NO. C105



TYPICAL SECTION

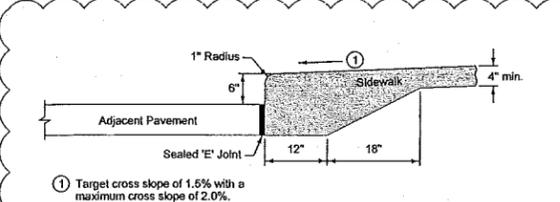
DIAMETER OF LARGEST PIPE, D	MINIMUM BAR SIZE
48" OR 54"	6
33" TO 42"	5
30" OR SMALLER	4

REINFORCING BAR LIST

MARK	SIZE	LOCATION	SHAPE	LENGTH	SPACING
T1	SEE TABLE	TOP	---	LONG WALL PLUS 8"	6"
T2	SEE TABLE	TOP	---	SHORT WALL PLUS 8"	6"
B1	SEE TABLE	BASE	---	LONG WALL PLUS 14"	12"
B2	SEE TABLE	BASE	---	SHORT WALL PLUS 14"	12"
W1	SEE TABLE	WALLS	---	LONG WALL PLUS 8"	12"
W2	SEE TABLE	WALLS	---	SHORT WALL PLUS 8"	12"
W3	SEE TABLE	WALLS	---	WALL HEIGHT MINUS 4"	12"

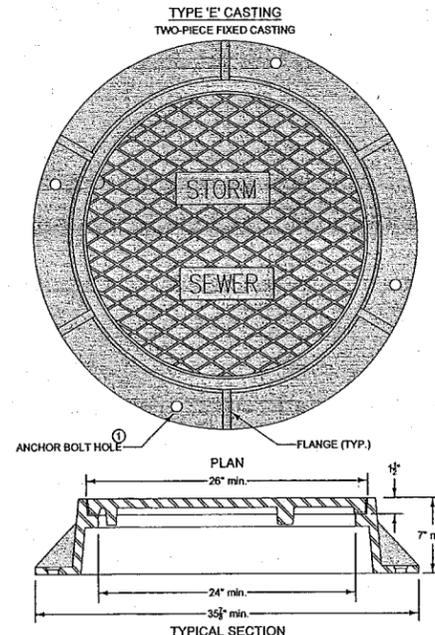
ADJACENT WALLS MAY HAVE DIFFERENT WIDTHS BASED UPON PIPE CONFIGURATION, BUT STRUCTURE MUST BE RECTANGULAR.

- CAST-IN-PLACE BASE SHOWN. IF BASE IS PRECAST INTEGRAL WITH WALLS, THE FOOTPRINT OF THE BASE IS NOT REQUIRED TO EXTEND BEYOND THE OUTER EDGE OF THE WALLS.
- WALL WIDTHS VARY WITH PIPE DIAMETER AND RANGE FROM 40 INCHES MINIMUM TO 77 INCHES MAXIMUM. PROVIDE 6 INCHES OF WALL WIDTH (MINIMUM) EACH SIDE OF PIPE OPENING.
- PROVIDE TWO #4 HOOP BARS AT TOP OPENING AND AT ALL PIPE OPENINGS.
- 12 INCH MINIMUM WALL HEIGHT ABOVE ALL PIPES.



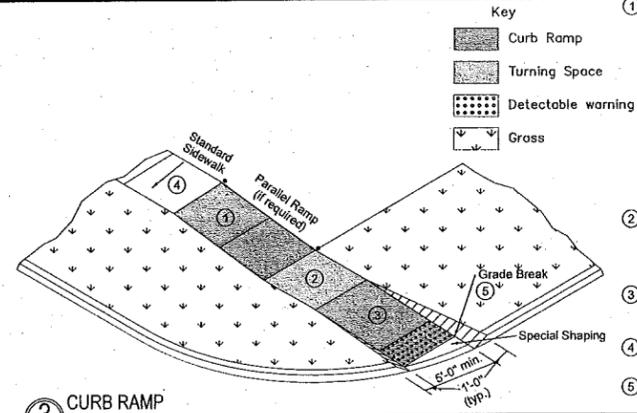
1 INTEGRAL CURB AND SIDEWALK
NOT TO SCALE

1 SW-402 RECTANGULAR STORM SEWER MANHOLE
NOT TO SCALE



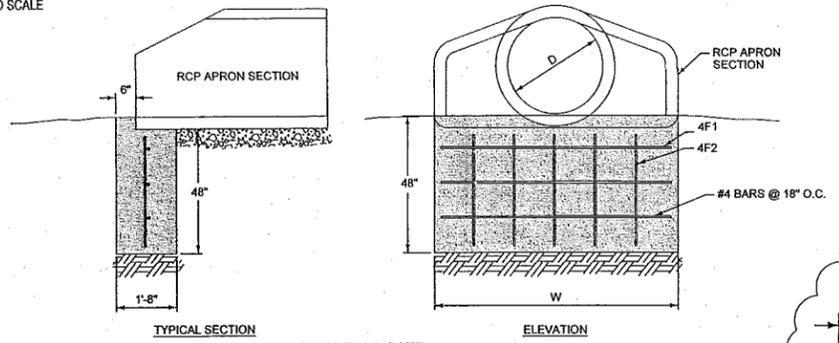
FRAME NOTES:
SIZE AND SPACING OF LUGS AND FLANGES MAY VARY.
COVER NOTES:
ROUGHNESS PATTERN AND TEXT STYLES MAY VARY.
MINIMUM ONE CONCEALED PICKHOLE.
① WHEN THE CONTRACT DOCUMENTS REQUIRE THE FRAME TO BE ATTACHED TO THE STRUCTURE, DRILL FOUR 3/4" DIAMETER HOLES OR SLOTS, EQUALLY SPACED AROUND FRAME.

2 SW-602 TYPE 'E' FRAME W/ SW-604 TYPE '4B' CASTING FOR STORM SEWER MANHOLES
NOT TO SCALE



3 CURB RAMP
NOT TO SCALE

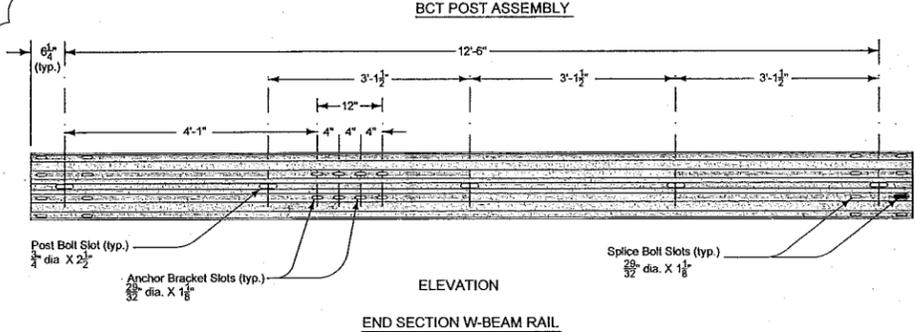
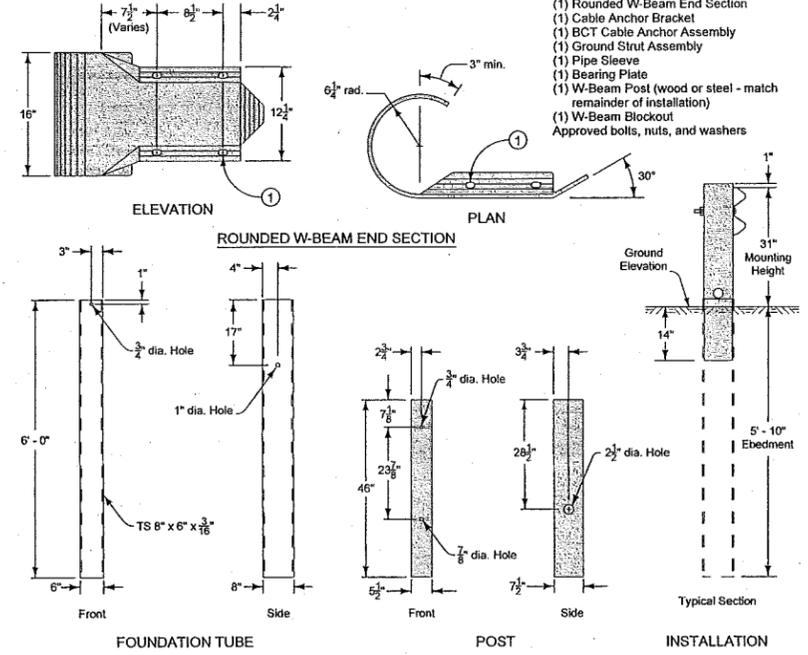
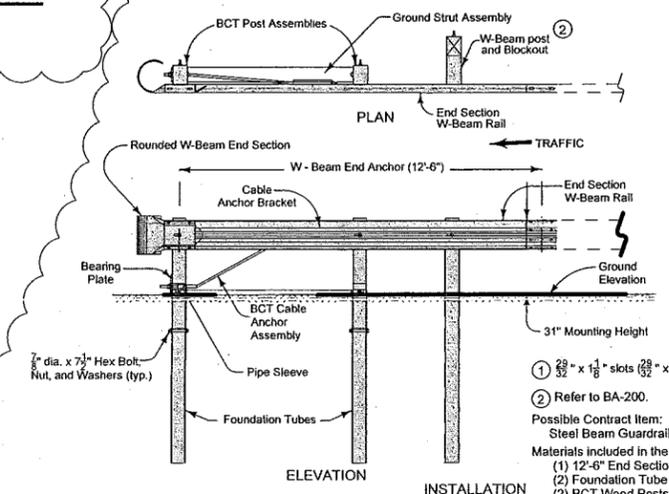
- Key**
- Curb Ramp
 - Turning Space
 - Detectable warning
 - Gross
- Parallel Curb Ramp: If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference between the landing and the standard sidewalk. The length of the parallel ramp is not required to exceed 15 feet, regardless of the resulting slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.
 - Turning Space: Target slope of 1.5% with maximum slope perpendicular to the travel directions of 2.0%. Minimum 5 feet by 5 feet.
 - Perpendicular Curb Ramp: Target running slope of 6.25% with maximum running slope of 8.3%.
 - Target cross slope of 1.5% with a maximum cross slope of 2.0%.
 - Match pedestrian street crossing cross slope or flatter.



REINFORCING BAR LIST

D	W	MARK	SIZE	LENGTH	COUNT
12"	2'-4"	4F1	4	2'-0"	3
		4F2	4	3'-8"	2
15"	2'-10 1/2"	4F1	4	2'-6 1/2"	3
		4F2	4	3'-8"	2
18"	3'-5"	4F1	4	3'-1"	3
		4F2	4	3'-8"	3
24"	4'-6"	4F1	4	4'-2"	3
		4F2	4	3'-8"	3
30"	5'-7"	4F1	4	5'-3"	3
		4F2	4	3'-8"	4
36"	6'-8"	4F1	4	6'-4"	3
		4F2	4	3'-8"	5
42"	7'-3"	4F1	4	6'-11"	3
		4F2	4	3'-8"	5
48"	7'-10"	4F1	4	7'-6"	3
		4F2	4	3'-8"	6
54"	8'-5"	4F1	4	8'-1"	3
		4F2	4	3'-8"	6
60"	8'-11"	4F1	4	8'-7"	3
		4F2	4	3'-8"	6
66"	8'-11"	4F1	4	8'-7"	3
		4F2	4	3'-8"	6
72"	10'-0"	4F1	4	9'-8"	3
		4F2	4	3'-8"	7
78"	10'-7"	4F1	4	10'-3"	3
		4F2	4	3'-8"	7
84"	11'-1"	4F1	4	10'-9"	3
		4F2	4	3'-8"	8

3 RCP APRON SECTION FOOTING
NOT TO SCALE



1 BA-203 STEEL BEAM GUARDRAIL
NOT TO SCALE

NO.	REVISION	DATE
A	CHANGE ORDER #1	05-13-15
A	CHANGE ORDER #2	05-29-15
A	CHANGE ORDER #4	03-22-16

DESIGNED: KLJ
DRAFTED: BAY
CHECKED: LTL
SCALE: N/A

PROJECT NO.: 056.001
FILE NUMBER: 056.001
SHEET NO.: C106
DATE: January 9, 2015

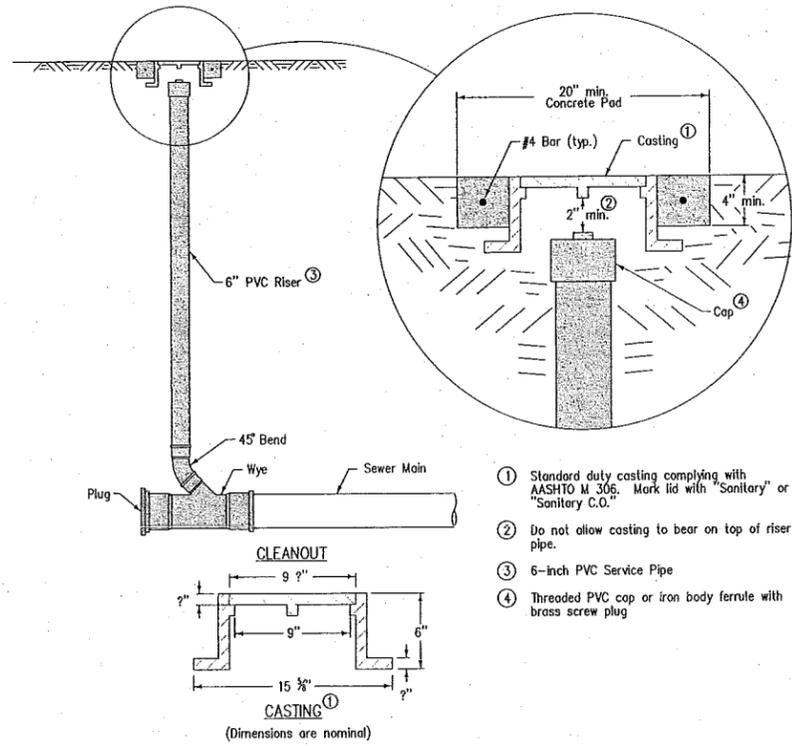
MRS. CLARK'S BUILDING ADDITION
740 SE DALBEY DRIVE
ANKENY, IOWA 50021
CIVIL DETAILS

LT LEON ASSOCIATES INC.
500 EAST LORIST STREET, SUITE 400
DES MOINES, IOWA 50319
office 515-422-7018
www.ltleon.com

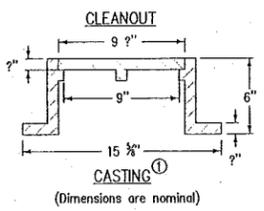
PROJECT NO 056.001

CIVIL DETAILS

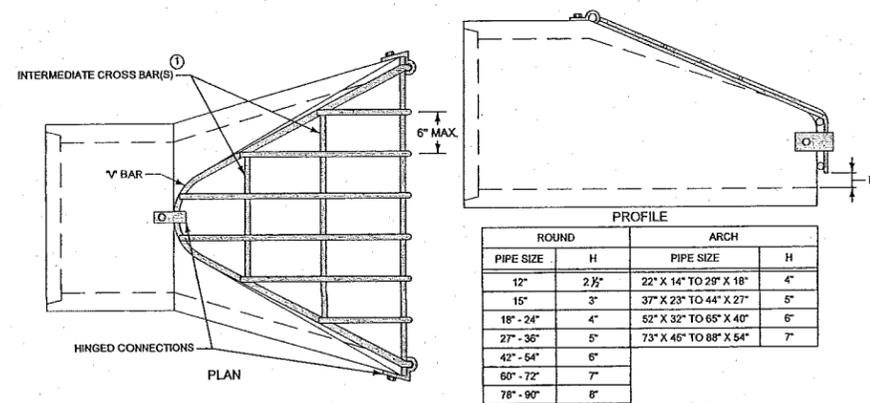
SHEET NO.
C106



- ① Standard duty casting complying with AASHTO M 306. Mark lid with "Sanitary" or "Sanitary C.O."
- ② Do not allow casting to bear on top of riser pipe.
- ③ 6-inch PVC Service Pipe
- ④ Threaded PVC cap or iron body ferrule with brass screw plug



① SW-203 SANITARY SEWER CLEANOUT
NOT TO SCALE



PROVIDE GUARD DIMENSIONS TO FIT WITH TYPE OF APRON PROVIDED (DR-201 OR DR-202). V-BAR IS TO COMPLETELY REST ON APRON.

USE ASTM A615, GRADE 40, OR MERCHANT QUALITY, SMOOTHED OR DEFORMED STEEL BARS IN CONSTRUCTION OF THE GUARD. COMPLY WITH FABRICATION REQUIREMENTS OF SECTION 2404 OF THE STANDARD SPECIFICATIONS.

HOT-DIP GALVANIZE THE COMPLETED APRON GUARD ACCORDING TO ASTM A123.

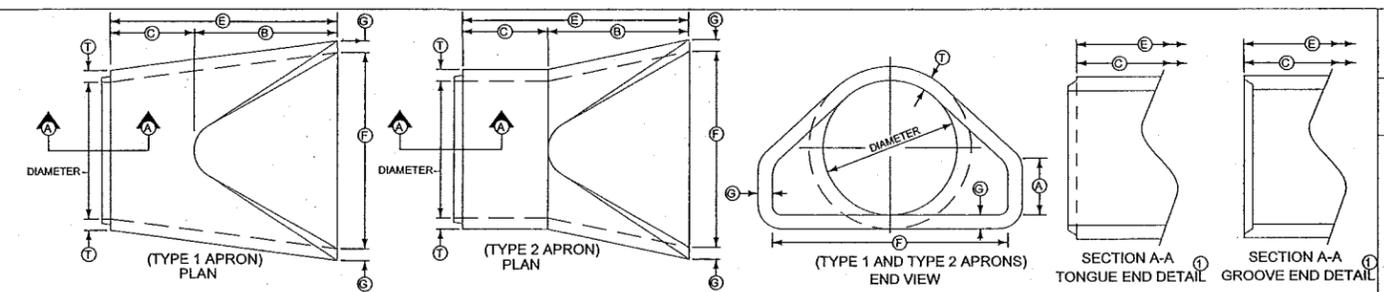
USE BOLTS, NUTS, WASHERS, AND FASTENERS COMPLYING WITH ARTICLE 4153.06 OF THE STANDARD SPECIFICATIONS.

① ALL GUARDS ARE TO HAVE AT LEAST ONE INTERMEDIATE CROSS BAR. IF PIPE SIZE IS 60 INCHES OR GREATER, USE TWO INTERMEDIATE CROSS BARS EQUALLY SPACED.

FRONT BAR SIZES			
PIPE SIZE	HOLE DIA. REQD.	BOLT DIA.	BAR SIZE
12" - 24"	3/4"	5/8"	3/4"
27" - 48"	7/8"	3/4"	1"
54" - 90"	1 1/2"	1"	1 1/2"
ROUND			
UP TO 28" X 18"	3/4"	5/8"	3/4"
37" X 23" TO 59" X 36"	7/8"	3/4"	1"
65" X 40" TO 88" X 54"	1 1/2"	1"	1 1/2"
ARCH			
UP TO 28" X 18"	3/4"	5/8"	3/4"
37" X 23" TO 59" X 36"	7/8"	3/4"	1"
65" X 40" TO 88" X 54"	1 1/2"	1"	1 1/2"

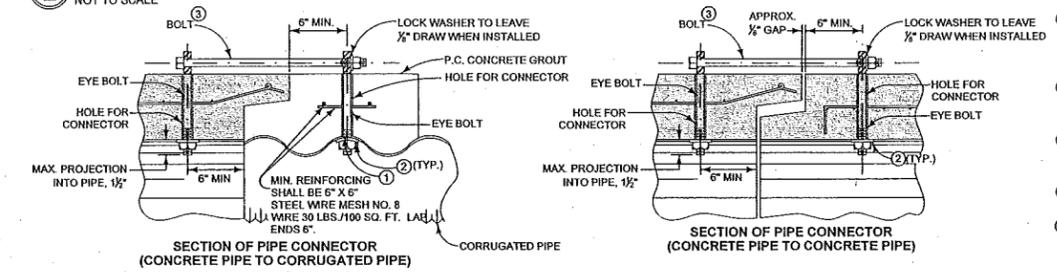
BOLT LENGTH = PIPE WALL THICKNESS + 2 1/2"

③ DR-213 PIPE APRON GUARD
NOT TO SCALE

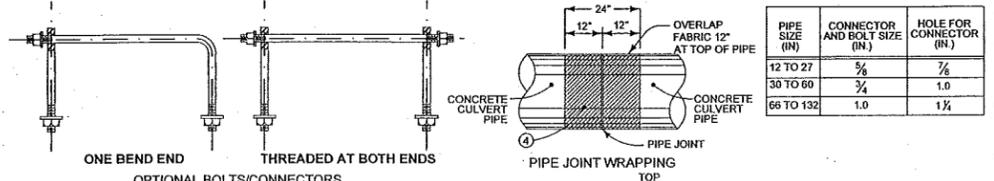


TYPE 1 APRONS										TYPE 2 APRONS									
DIAM.	SLOPE	A	B	MINIMUM C	E	F	G	T		DIAM.	SLOPE	A	B	MINIMUM C	E	F	G	T	
12"	2.4:1	4"	2'-0"	4'-3/4"	6'-3/4"	2'-0"	2"	2"		12"	2.4:1	4"	2'-0"	4'-3/4"	6'-3/4"	2'-0"	2"	2"	
15"	2.4:1	6"	2'-3"	3'-10"	6'-1"	2'-6"	2 1/2"	2 1/2"		15"	2.4:1	6"	2'-3"	3'-10"	6'-1"	2'-6"	2 1/2"	2 1/2"	
18"	2.3:1	9"	2'-3"	3'-10"	6'-1"	3'-0"	2 1/2"	2 1/2"		18"	2.3:1	9"	2'-3"	3'-10"	6'-1"	3'-0"	2 1/2"	2 1/2"	
21"	2.4:1	9"	3'-0"	3'-1 1/2"	6'-1 1/2"	3'-5"	3"	3"		21"	2.4:1	9"	3'-0"	3'-1 1/2"	6'-1 1/2"	3'-5"	3"	3"	
24"	2.5:1	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	3"	3"		24"	2.5:1	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	3"	3"	
27"	2.5:1	10 1/2"	4'-1"	2'-0"	6'-1 1/2"	4'-4"	3 1/2"	3 1/2"		27"	2.5:1	10 1/2"	4'-1"	2'-0"	6'-1 1/2"	4'-4"	3 1/2"	3 1/2"	
30"	2.5:1	12"	4'-6"	1'-7 3/4"	6'-1 1/2"	5'-0"	3 1/2"	3 1/2"		30"	2.5:1	12"	4'-6"	1'-7 3/4"	6'-1 1/2"	5'-0"	3 1/2"	3 1/2"	
36"	2.5:1	15"	5'-3"	2'-9"	6'-0"	6'-0"	4"	4"		36"	2.5:1	15"	5'-3"	2'-9"	6'-0"	6'-0"	4"	4"	
42"	2.5:1	21"	6'-3"	2'-9"	6'-0"	6'-6"	4 1/2"	4 1/2"		42"	2.5:1	21"	6'-3"	2'-9"	6'-0"	6'-6"	4 1/2"	4 1/2"	
48"	2.5:1	24"	6'-0"	2'-0"	6'-0"	7'-0"	5"	5"		48"	2.5:1	24"	6'-0"	2'-0"	6'-0"	7'-0"	5"	5"	
54"	1.8:1	27"	5'-0"	3'-0"	6'-0"	7'-6"	5 1/2"	5 1/2"		54"	1.8:1	27"	5'-0"	3'-0"	6'-0"	7'-6"	5 1/2"	5 1/2"	
60"	1.8:1	28 1/2"	5'-0"	3'-0"	6'-0"	8'-0"	5 1/2"	6"		60"	1.8:1	28 1/2"	5'-0"	3'-0"	6'-0"	8'-0"	5 1/2"	6"	
66"	1.7:1	30"	6'-0"	2'-3"	6'-0"	8'-0"	5 1/2"	6"		66"	1.7:1	30"	6'-0"	2'-3"	6'-0"	8'-0"	5 1/2"	6"	
72"	1.6:1	30"	6'-6"	1'-9"	6'-3"	9'-0"	6"	7"		72"	1.6:1	30"	6'-6"	1'-9"	6'-3"	9'-0"	6"	7"	
78"	1.8:1	36"	7'-6"	1'-9"	9'-3"	9'-6"	6 1/2"	7 1/2"		78"	1.8:1	36"	7'-6"	1'-9"	9'-3"	9'-6"	6 1/2"	7 1/2"	
84"	1.3:1	28 1/2"	6'-9"	2'-6 1/2"	9'-3 1/2"	10'-0"	6 1/2"	8"		84"	1.3:1	28 1/2"	6'-9"	2'-6 1/2"	9'-3 1/2"	10'-0"	6 1/2"	8"	

② DR-201 CONCRETE APRONS
NOT TO SCALE

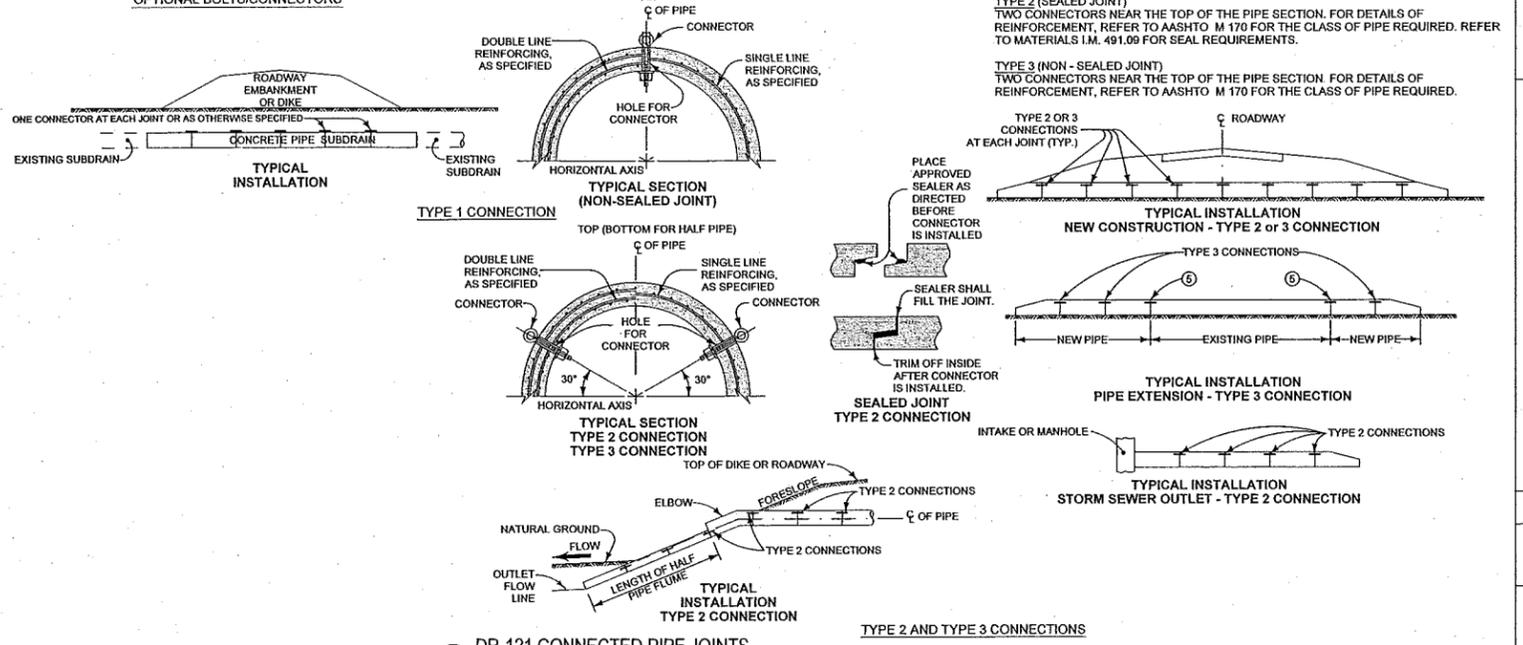


- ① IF HOLES ARE FIELD DRILLED, PLACE A RIBBON OF BUTYL SEALANT AROUND BOLTS BEFORE PLACING 3 IN. X 3 IN. X 1/2 IN. PLATE ON BOLTS THROUGH CORRUGATED METAL PIPE AND TIGHTENING NUTS.
- ② 1 1/2 INCH ROUND X 3/8 INCH THICK WASHER OR 3 IN. X 3 IN. X 1/4 IN. SQUARE PLATE (SHAPED TO PIPE RADIUS).
- ③ CONNECTORS WITH ONE BEND END AND BELL END SPACERS ALLOWED PER MATERIALS I.M. 451. REFER TO OPTIONAL BOLTS DETAIL.
- ④ ENGINEERING FABRIC FOR EMBANKMENT EROSION CONTROL.
- ⑤ ON CULVERT EXTENSIONS, CONNECT ALL NEW JOINTS INCLUDING THE JOINT BETWEEN THE OLD AND NEW CULVERT PIPE. HOLES MAY NEED TO BE DRILLED INTO EXISTING PIPES.



PIPE SIZE (IN)	CONNECTOR AND BOLT SIZE (IN)	HOLE FOR CONNECTOR (IN)
12 TO 27	3/4"	7/8"
30 TO 60	7/8"	1.0"
66 TO 132	1.0"	1 1/4"

WRAP ALL JOINTS ON CONCRETE ROADWAY PIPE CULVERTS. USE TYPE 3 CONNECTIONS ON ALL CULVERT PIPES, UNLESS SPECIFIED OTHERWISE. REFER TO MATERIALS I.M. 445.01 FOR CONNECTOR REQUIREMENTS. MINIMUM 2 THREADS SHOWING AT ALL THREADED ENDS. CONNECTIONS NOT REQUIRED ON PIPE SECTIONS INSTALLED BY TRENCHLESS METHODS.



④ DR-121 CONNECTED PIPE JOINTS
NOT TO SCALE

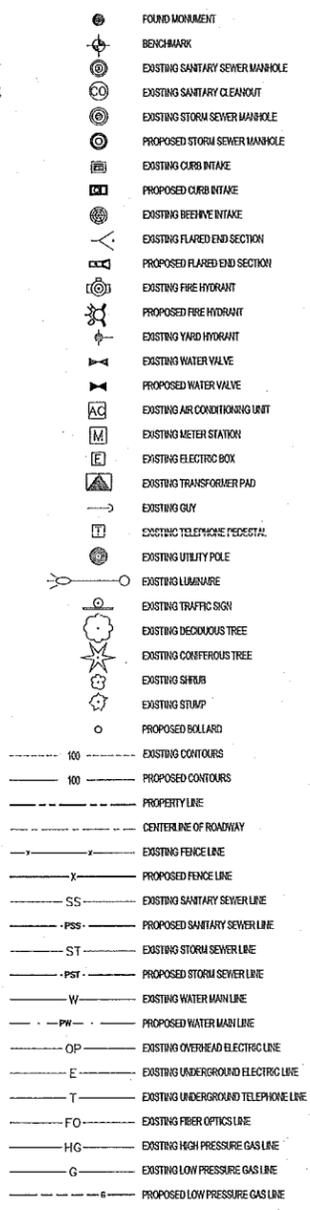
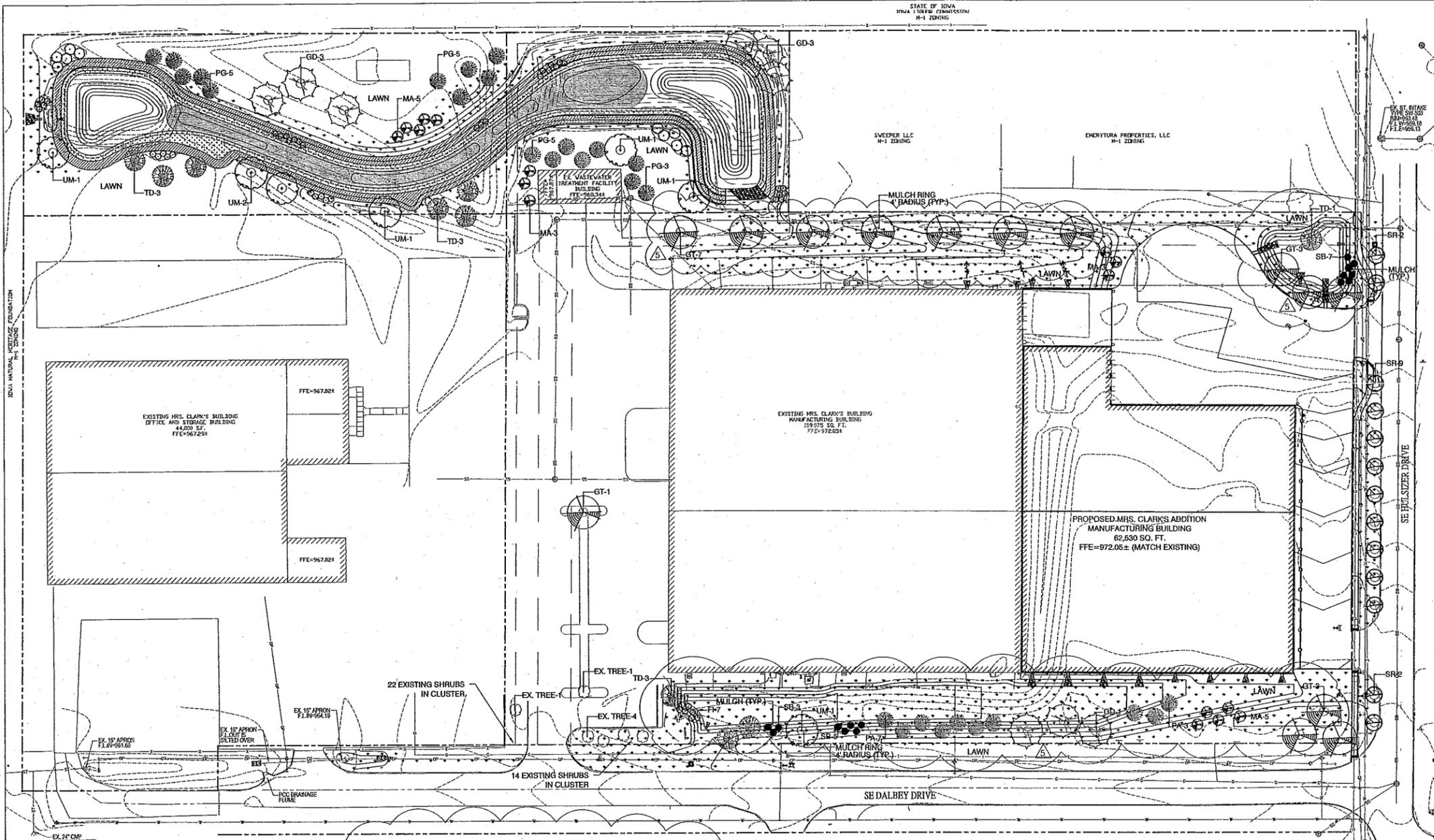
NO.	CHANGE ORDER	REVISION	DATE
1			05-13-15

PROJECT NO. 056.001
FILE NUMBER 056.001
SHEET NO. C107
DATE: January 6, 2015

MRS. CLARK'S BUILDING ADDITION
740 SE DALBEY DRIVE
ANKENY, IOWA 50021
CIVIL DETAILS

LEON ASSOCIATES INC.
www.leon.com
500 EAST LOUISET STREET, SUITE 400
DES MOINES, IOWA 50309

PROJECT NO. 056.001
CIVIL DETAILS
SHEET NO. C107



NO.	REVISION	DATE
1	CHANGE ORDER#1	05-13-15
2	CHANGE ORDER#4	03-22-16

DESIGNED: M.W.
DRAFTED: M.W.
CHECKED: R.B.R.
SCALE: 1"=50'

MRS. CLARK'S BUILDING ADDITION
740 SE DALBY DRIVE
ANKENY, IOWA 50021
LANDSCAPE PLAN

PROJECT NO. 056.001
LANDSCAPE PLAN
SHEET NO.
L100

LT LEON ASSOCIATES INC.
office: 515-422-7016
www.ltleon.com
500 EAST LOCUST STREET SUITE 400
DES MOINES IOWA 50309

LANDSCAPE NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF ANKENY STANDARDS AND SPECIFICATIONS.
- LOCATE ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PLANT MATERIAL. NOTIFY OWNER OF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THOSE SHOWN ON THE PLAN.
- VERIFICATION OF TOTAL QUANTITIES AS SHOWN ON THE PLANT LIST SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR AND THE TOTAL QUANTITIES SHALL BE AS SHOWN ON THE PLAN.
- ALL PLANT MATERIAL SHALL CONFORM WITH THE STANDARDS SET FORTH IN THE LATEST EDITION OF THE "AMERICAN STANDARD NURSERY STOCK" ANSI Z66 PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- PLANTING BEDS TO BE MULCHED WITH A MINIMUM OF 3" OF DOUBLE SHREDED HARDWOOD MULCH. ALL PLANT GROUPINGS SHALL BE MULCHED AS ONE BED.
- ESTABLISH POSITIVE DRAINAGE IN ALL PLANTING BEDS AND AWAY FROM BUILDINGS.
- APPLY PRE-EMERGENT HERBICIDE TO ALL NEW PLANTING BEDS AT MANUFACTURER'S RECOMMENDED RATE PRIOR TO INSTALLATION OF MULCH.
- DO NOT INSTALL PLANT MATERIAL IN IMPERVIOUS SOILS. (i.e. HOLES WHICH, WHEN FILLED WITH WATER, DO NOT COMPLETELY DRAIN WITHIN TWO HOURS.)
- ALL LAWN AREAS TO BE BLUEGRASS BLEND WITH FESCUE AND PERENNIAL RYE. SEED BLEND TO BE SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.
- ANY TREE WRAP SHALL BE REMOVED IMMEDIATELY AFTER INSTALLATION.
- THE REQUIRED LANDSCAPING, BOTH EXISTING AND PROPOSED SHALL BE MAINTAINED FOR THE LIFE OF THE CERTIFICATE OF OCCUPANCY OR CERTIFICATE OF ZONING COMPLIANCE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A STREET TREE PLANTING PERMIT FOR TREES SHOWN IN THE ROW. IF THE SPECIES/LOCATIONS ARE NOT APPROVED, THE TREES WILL BE RELOCATED SOMEWHERE ON THE SITE.

PLANT LIST

KEY	QTY	PLANT NAME	SIZE	REMARKS
TREES				
SR	13	SYRINGA RETICULATA 'IVORY SILK'	2" HT. BAB	FULL CROWN, STRAIGHT TRUNK
MA	16	MAACKIA AMURENSIS 'AMUR MAACKIA'	2" HT. BAB	FULL CROWN, STRAIGHT TRUNK
GT	14	GLEDITSIA TRICANTHOS VAR. 'IBERIS SKYCOOL'	2" CAL. BAB	FULL CROWN, STRAIGHT TRUNK
GD	9	GYNANDROCLADUS 'ESPRESSO'	2" CAL. BAB	FULL CROWN, STRAIGHT TRUNK
PA	10	PICEA ABIES 'NORWAY SPRUCE'	7-8" HT. BAB	FULL TO GROUND, STRAIGHT TRUNK
PG	18	PICEA GLAUCA 'BLACK HILLS SPRUCE'	7-8" HT. BAB	FULL TO GROUND, STRAIGHT TRUNK
UM	7	ULMUS 'MORTON'	2" CAL. BAB	FULL CROWN, STRAIGHT TRUNK
TD	10	TAXODIUM DISTICHUM 'SHAWNEE BRAVE BALD CYPRESS'	2" CAL. BAB	FULL CROWN, STRAIGHT TRUNK
SHRUBS				
SB	15	SPIRAEA BETULIFOLIA 'TOR'	#5 CONT. FULL	SPACING 3' O.C.
HO	28	HYDRANGEA QUERCIFOLIA 'ALICE'	#5 CONT. FULL	SPACING 3' O.C.
FI	17	FOXYSTYIA X INTERMEDIA 'NEW HAMPSHIRE GOLD'	#5 CONT. FULL	SPACING 3' O.C.
HV	10	HAMAMELIS VIRGINIANA 'WITCH HAZEL'	#5 CONT. FULL	SPACING 3' O.C.

GRAPHIC SYMBOLS SUPERSEDE WRITTEN QUANTITIES WHERE DISCREPANCIES OCCUR
SEE LANDSCAPE PLANTING DETAILS SHEET L101

LANDSCAPE CALCULATIONS

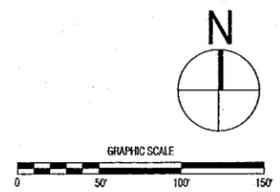
SITE IS ZONED M-1
OPEN SPACE REQUIREMENTS
TOTAL SITE AREA: 481,878 SQ. FT. (11.06 ACRES)
OPEN SPACE REQUIRED: 96,336 SQ. FT. (20.0%)
OPEN SPACE PLANT UNITS REQUIRED: 96,336/3,000 = 32
REQUIRED OPEN SPACE PLANTINGS: 32 x 3 = 96 TREES, 32 x 3 = 96 SHRUBS
OPEN SPACE PLANTINGS PROVIDED:
TREES = 103 (6 EXISTING + 97 NEW) (INCLUDES 1/2 OF SHADING TREES)
SHRUBS = 96 (26 EXISTING + 70 NEW) (INCLUDES PLANTINGS ON SHEET L101)
PARKING AREA PLANTING REQUIREMENTS
NEW PAVED AREA: 40,801 SQ. FT.
REQUIRED SHADED AREA: 8,160 SQ. FT. (20%)
SHADING TREES REQUIRED: 11
SHADING TREES PROVIDED = 14

I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed professional landscape architect under the laws of the state of Iowa.

Printed or typed name
Molly Rennebohm Wood

Signature

Pages or sheets covered by this seal:
Landscape Plan (L100)
Stormwater Pond Landscape Plan (L101)



TOPOGRAPHIC LEGEND

- FOUND MONUMENT
- BENCHMARK
- EXISTING SANITARY SEWER MANHOLE
- EXISTING SANITARY CLEANOUT
- EXISTING STORM SEWER MANHOLE
- PROPOSED STORM SEWER MANHOLE
- EXISTING CURB INTAKE
- PROPOSED CURB INTAKE
- EXISTING BEEHIVE INTAKE
- EXISTING FLARED END SECTION
- PROPOSED FLARED END SECTION
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING YARD HYDRANT
- EXISTING WATER VALVE
- PROPOSED WATER VALVE
- EXISTING AIR CONDITIONING UNIT
- EXISTING METER STATION
- EXISTING ELECTRIC BOX
- EXISTING TRANSFORMER PAD
- EXISTING GUY
- EXISTING TELEPHONE PEDESTAL
- EXISTING UTILITY POLE
- EXISTING LUMINAIRE
- EXISTING TRAFFIC SIGN
- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE
- EXISTING SHRUB
- EXISTING STUMP
- PROPOSED BOLLARD
- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPERTY LINE
- CENTERLINE OF ROADWAY
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- EXISTING SANITARY SEWER LINE
- PROPOSED SANITARY SEWER LINE
- EXISTING STORM SEWER LINE
- PROPOSED STORM SEWER LINE
- EXISTING WATER MAIN LINE
- PROPOSED WATER MAIN LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING FIBER OPTICS LINE
- EXISTING HIGH PRESSURE GAS LINE
- EXISTING LOW PRESSURE GAS LINE
- PROPOSED LOW PRESSURE GAS LINE
- FILTER SOCK
- BUILDING LIMITS
- STEEL BEAM GUARDRAIL
- FINISHED FLOOR ELEVATION
- CRITICAL CROSSING
- PROPOSED PCC PAVEMENT
- PROPOSED GRAVEL SHOULDER
- PROPOSED PAVEMENT REPLACEMENT (MATCH EXISTING PAVEMENT SECTION)
- APPROXIMATE DISTURBED AREA (TO BE RESEDED) (AREA=2.3 AC)

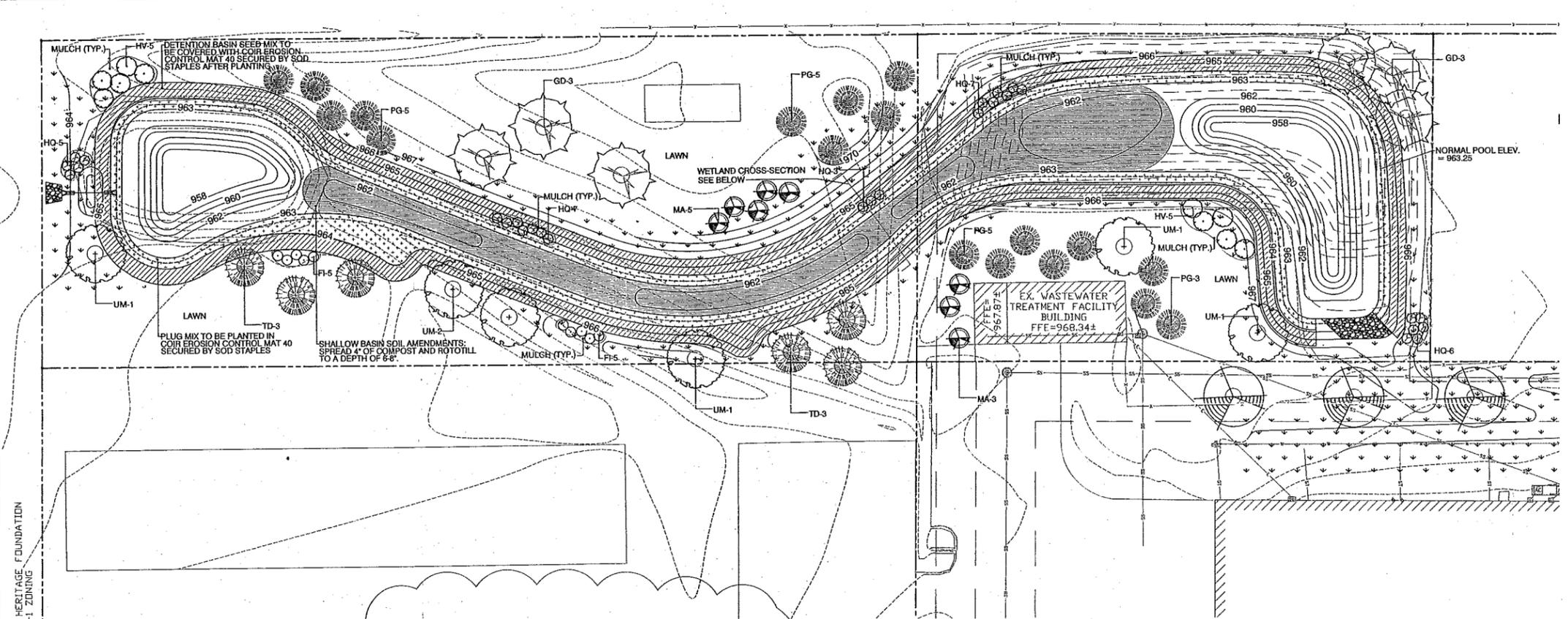
NO.	REVISION	DATE
1	CHANGE ORDER #1	05-13-15
2	CHANGE ORDER #4	05-22-16

DESIGNED: MJW	PROJECT NO: 056.001
DRAFTED: MJW	FILE NUMBER: 056.001
CHECKED: RBR	SHEET NO.: L101
SCALE: 1:30	DATE: January 9, 2015

MRS. CLARK'S BUILDING ADDITION
740 SE DALBEY DRIVE
ANKENY, IOWA 50021
STORMWATER POND LANDSCAPE PLAN

LT LEON ASSOCIATES INC.
office: 515-402-7016
www.ltleon.com
500 EAST LOCUST STREET SUITE 400
DES MOINES IOWA 50309

PROJECT NO. 056.001
STORMWATER POND LANDSCAPE PLAN
SHEET NO.
L101

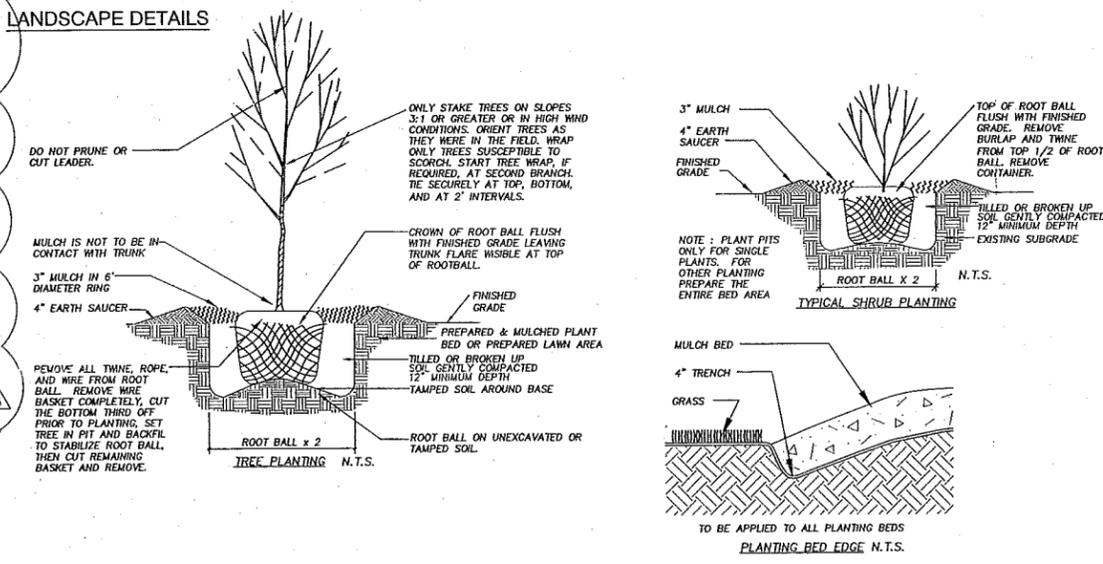


STORMWATER POND MAINTENANCE SCHEDULE

DESCRIPTION	METHOD	FREQUENCY	SEASON
SOIL			
INSPECT AND REPAIR EROSION	VISUAL	MONTHLY	ALL
PLANTS			
REPLACE ANY DEAD OR DISEASED VEGETATION	SEE PLANTING SPECIFICATIONS	TWICE PER YEAR	SPRING SUMMER
TREAT ALL DISEASED PLANTS NOT TO BE REMOVED	MECHANICAL OR BY HAND	AS NEEDED	ALL
WATER PLANT MATERIAL AT END OF EACH DAY FOR 14 CONSECUTIVE DAYS AFTER PLANTING	BY HAND	IMMEDIATELY AFTER PROJECT COMPLETION	N/A
REMOVE ALL VOLUNTIER PLANTS OF INVASIVE SPECIES	BY HAND	AS NEEDED	ALL
RE-MULCH ANY VOID AREAS AROUND SHRUBS AND TREES	BY HAND	AS NEEDED	ALL
ADD MULCH AROUND SHRUBS AND TREES	BY HAND	ONCE PER YEAR	SPRING
MOWING PLANTS TO HEIGHT OF 4-5"	BY HAND-HELD STRING TRIMMERS	WHEN WEED GROWTH REACHES 8-10"	1ST GROWING SEASON ONLY

PLANT LIST

KEY	QTY	PLANT NAME	SIZE	REMARKS
SR	13	SYRINGA RETICULATA 'IVORY SILK' IVORY SILK TREE LILAC	2" HT. B&B	FULL CROWN, STRAIGHT TRUNK
MA	16	MAGNOLIA AMURENSIS AMUR MAACKIA	2" HT. B&B	FULL CROWN, STRAIGHT TRUNK
GT	14	GLEDITSIA TRACANTHOS VAR. INERMIS 'SKYCOLE' SKYLINE HONEYLOCUST	2" CAL. B&B	FULL CROWN, STRAIGHT TRUNK
GD	9	GYMNOCLADUS DIOICA 'ESPRESSO' ESPRESSO KENTUCKY COFFEETREE	2" CAL. B&B	FULL CROWN, STRAIGHT TRUNK
PA	10	PRINIA ACERIS NORWAY SPRUCE	7-8" HT. B&B	FULL TO GROUND STRAIGHT TRUNK
PG	18	PRINIA GLAUGA DENSATA BLACK HILLS SPRUCE	7-8" HT. B&B	FULL TO GROUND STRAIGHT TRUNK
UM	7	ULMUS 'MORTON' ACCOLADE ELM	2" CAL. B&B	FULL CROWN, STRAIGHT TRUNK
TD	10	TAXODIUM DISTICHUM 'MICKELSON' SHAWNEE BRAVE BALD CYPRESS	2" CAL. B&B	FULL CROWN, STRAIGHT TRUNK
SR	15	SPARGANIA BETULIFOLIA 'TOR' TOR BIRCHLEAF SPIREA	#5 CONT.	SPACING 3' O.C. FULL
HJ	26	HYDRANGEA OBTUSIFOLIA 'ALICE' ALICE DANLEAF HYDRANGEA	#5 CONT.	SPACING 6' O.C. FULL
FI	17	FORSYTHIA X INTERMEDIA 'NEW HAMPSHIRE GOLD' NEW HAMPSHIRE GOLD FORSYTHIA	#5 CONT.	SPACING 6' O.C. FULL
HV	10	HAMAMELIS VIRGINIANA 'WITCHAMAZEL'	#5 CONT.	SPACING 6' O.C. FULL

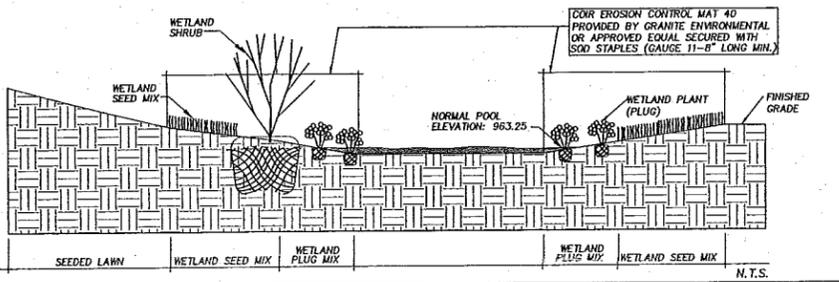


STORMWATER POND PLANTING LIST

KEY	QTY	PLANT NAME	SIZE	REMARKS
2.30	1	WATER'S EDGE BEAUTIFICATION PLUG MIX FROM ION EXCHANGE, INC. OR APPROVED EQUAL	PLUGS	SPACING 18-24" O.C.
3	1	DETENTION BASIN SEED MIX FROM PRAIRIE MOON NURSERY OR APPROVED EQUAL	SEED	15 BBS/ACRE

PLANTING PITS SHALL FOLLOW ALL SPECIFICATIONS FOR OTHER CONTAINER GROWN, TERRESTRIAL HERBACEOUS MATERIAL.

STORMWATER POND PLANTING CROSS-SECTION



I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed professional landscape architect under the laws of the state of Iowa.

Printed or typed name
Molly Rennebohm Wood

Signature

Pages or sheets covered by this seal:
Landscape Plan (L100)
Stormwater Pond Landscape Plan (L101)

