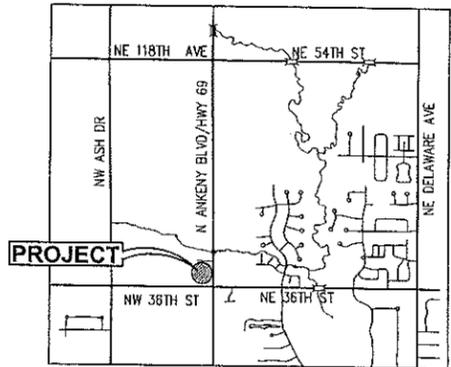


# SITE PLAN FOR: AUTUMN CREST RETAIL PLAZA

## ANKENY, IOWA

### VICINITY MAP

NOT TO SCALE



### OWNER / APPLICANT

KIMBERLEY PROPERTIES INC.  
P.O. BOX 369  
ANKENY, IOWA 50021  
PHONE: 515-963-8335

### ENGINEER

CIVIL DESIGN ADVANTAGE, LLC  
CONTACT: DEAN ROGHAIAR  
3405 SE CROSSROADS DRIVE, SUITE G  
GRIMES, IOWA 50111  
PH. (515) 369-4400  
FX. (515) 369-4410

### SURVEYOR

CIVIL DESIGN ADVANTAGE, LLC  
CONTACT: MIKE BRODNER  
3405 SE CROSSROADS DRIVE, SUITE G  
GRIMES, IOWA 50111  
PH. (515) 369-4400  
FX. (515) 369-4410

### LEGAL DESCRIPTION

A PART OF PARCEL 'A' AS SHOWN ON THE PLAT OF SURVEY RECORDED IN BOOK 7797 PAGE 457 IN SECTION 2, TOWNSHIP 80 NORTH, RANGE 24 WEST OF THE FIFTH PRINCIPAL MERIDIAN, CITY OF ANKENY, POLK COUNTY, IOWA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF LOT 3, AUTUMN CREST PLAT 1, AN OFFICIAL PLAT; THENCE NORTH 89°46'18" WEST ALONG THE NORTH RIGHT OF WAY LINE OF NW 36TH STREET AND THE NORTH LINE OF THE ACQUISITION PLAT RECORDED IN BOOK 11176 PAGE 387, POLK COUNTY, IOWA, 375.74 FEET; THENCE NORTH 0°09'33" EAST, 297.41 FEET; THENCE SOUTH 89°55'22" EAST, 376.10 FEET TO THE NORTHWEST CORNER OF SAID LOT 3; THENCE SOUTH 0°13'42" WEST ALONG THE WEST LINE OF SAID LOT 3, A DISTANCE OF 298.40 FEET TO THE POINT OF BEGINNING AND CONTAINING 2.57 ACRES (111,930 SQUARE FEET). THE PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

### DATE OF SURVEY

JULY, 2016

### SUBMITTAL DATES

-SITE PLAN SUBMITTAL TO CITY #1: 08/19/2016  
-SITE PLAN SUBMITTAL TO CITY #2: 09/09/2016  
-SITE PLAN SUBMITTAL TO CITY #3: 09/20/2016  
-FINAL SITE PLAN SUBMITTAL TO CITY: 09/23/2016

### INDEX OF SHEETS

NO.	DESCRIPTION
1	COVER SHEET
2	DETAILS
3	DIMENSION PLAN
4	GRADING PLAN
5	UTILITY PLAN
6	LANDSCAPE PLAN

### EQUIVALENT RESIDENTIAL UNIT (ERU)

• 1 ERU = 4,000 SF OF IMPERVIOUS AREA.

LOT 1:  
43,786 SF OF IMPERVIOUS AREA  
43,786 SF / 4,000 = 11 ERUs

LOT 2:  
43,907 SF OF IMPERVIOUS AREA  
43,907 SF / 4,000 = 11 ERUs

### ZONING

C-2: GENERAL RETAIL, HIGHWAY ORIENTED, AND CENTRAL BUSINESS COMMERCIAL DISTRICT

### DEVELOPMENT SUMMARY

AREA: 2.57 ACRES (111,936 SF SF)

C-2 COMMERCIAL  
- FRONT YARD SETBACK: 35 FT  
- SIDE YARD SETBACK (ADJOINING R DISTRICT): 25 FT  
- REAR YARD SETBACK: 40 FT  
- MAXIMUM HEIGHT: 45 FT  
- MAXIMUM NUMBER OF STORES: 3

### PARKING

REQUIRED:  
1/ 100 SF OF RESTAURANT = 105 SPACES  
10,516 SF  
1/ 4 OUTDOOR SEATS = 11 SPACES  
44 SEATS  
1/ 200 SF OF RETAIL = 35 SPACES  
6,894 SF  
TOTAL REQUIRED = 151 SPACES (PHASE 1=76 SPACES)

PROVIDED:  
STANDARD: =153 SPACES (PHASE 1=75)  
ACCESSIBLE: = 6 SPACES (PHASE 1= 3)  
TOTAL =159 SPACES (PHASE 1=76 SPACES)

DRIVE-THRU  
5 SPACES PROVIDED FOR EACH DRIVE-THRU WINDOW.  
SPACES MAY ENCR OACH PRIVATE DRIVES.

### BENCHMARKS

CITY OF ANKENY BM#127, IDOT BM @ NW COR TOP OF WING WALL OF BRIDGE OVER FOUR MILE CREEK ON 100TH, ELEVATION = 922.03

BURY BOLT ON HYDRANT ON AUTUMN CREST DR 555'+/- WEST OF HIGHWAY 69 ON SOUTH SIDE OF STREET, ELEVATION = 948.64

### GENERAL LEGEND

PROPOSED	EXISTING
PROJECT BOUNDARY	SANITARY MANHOLE
LOT LINE	WATER VALVE BOX
SECTION LINE	FIRE HYDRANT
CENTER LINE	WATER CURB STOP
RIGHT OF WAY	WELL
PERMANENT EASEMENT	STORM SEWER MANHOLE
TEMPORARY EASEMENT	STORM SEWER SINGLE INTAKE
TYPE SW-501 STORM INTAKE	STORM SEWER DOUBLE INTAKE
TYPE SW-503 STORM INTAKE	FLARED END SECTION
TYPE SW-505 STORM INTAKE	ROOF DRAIN/ DOWNSPOUT
TYPE SW-506 STORM INTAKE	DECIDUOUS TREE
TYPE SW-513 STORM INTAKE	CONIFEROUS TREE
TYPE SW-401 STORM MANHOLE	DECIDUOUS SHRUB
TYPE SW-402 STORM MANHOLE	CONIFEROUS SHRUB
TYPE SW-301 SANITARY MANHOLE	ELECTRIC POWER POLE
STORM/SANITARY CLEANOUT	GUY ANCHOR
WATER VALVE	STREET LIGHT
FIRE HYDRANT ASSEMBLY	POWER POLE W/ TRANSFORMER
SIGN	UTILITY POLE W/ LIGHT
DETECTABLE WARNING PANEL	ELECTRIC BOX
STORM SEWER STRUCTURE NO.	ELECTRIC TRANSFORMER
STORM SEWER PIPE NO.	ELECTRIC MANHOLE OR VAULT
SANITARY SEWER STRUCTURE NO.	TRAFFIC SIGN
SANITARY SEWER PIPE NO.	TELEPHONE JUNCTION BOX
SANITARY SEWER WITH SIZE	TELEPHONE MANHOLE/VAULT
SANITARY SERVICE	TELEPHONE POLE
STORM SEWER	GAS VALVE BOX
STORM SERVICE	CABLE TV JUNCTION BOX
WATERMAIN WITH SIZE	CABLE TV MANHOLE/VAULT
WATER SERVICE	MAIL BOX
SAWCUT (FULL DEPTH)	BENCHMARK
SILT FENCE	SOIL BORING
	UNDERGROUND TV CABLE
	GAS MAIN
	FIBER OPTIC
	UNDERGROUND TELEPHONE
	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC
	FIELD TILE
	SANITARY SEWER W/ SIZE
	STORM SEWER W/ SIZE
	WATER MAIN W/ SIZE



1-800-292-8989  
www.iowaonecall.com

### UTILITY WARNING

ANY UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND RECORDS OBTAINED BY THIS SURVEYOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION SHOWN.



**CIVIL DESIGN ADVANTAGE**  
3405 SE CROSSROADS DR, SUITE G, GRIMES, IOWA 50111  
PH: (515) 369-4400 Fax: (515) 369-4410  
PROJECT NO. 1601023

THE PROJECT REQUIRES AN IOWA NPDES PERMIT #2 AND CITY OF ANKENY GRADING PERMIT. CIVIL DESIGN ADVANTAGE WILL PROVIDE THE PERMITS AND THE INITIAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE CONTRACTOR'S USE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING THE SWPPP THROUGHOUT CONSTRUCTION AND MEETING LOCAL, STATE AND FEDERAL REQUIREMENTS.

ALL CONSTRUCTION MATERIALS, DUMPSTERS, DETACHED TRAILERS OR SIMILAR ITEMS ARE PROHIBITED ON PUBLIC STREETS OR WITHIN THE PUBLIC R.O.W.

THE MOST RECENT EDITION OF THE SDAS STANDARD SPECIFICATIONS, THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG) AND ALL CITY SUPPLEMENTALS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

*R. Dean Roghair* 9/23/16  
R. DEAN ROGHAIAR, P.E. DATE

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2017  
PAGE(S) OR SHEET(S) COVERED BY THIS SEAL:  
1-5

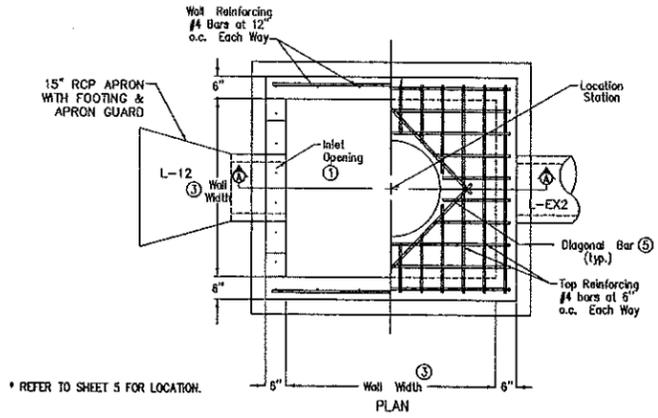
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 BY: [Signature]  
 COUNTY: POLK  
 REC'D: [Signature]

CITY OF ANKENY  
 SEP 23 2016  
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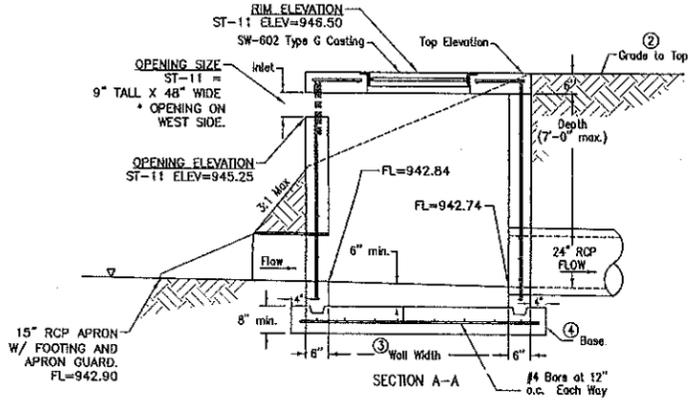
Structure may be built with openings on any or all sides. Provides openings and orientation as specified in the construction drawings.

Adjacent walls may have different widths based upon pipe configuration, but structure must be rectangular.

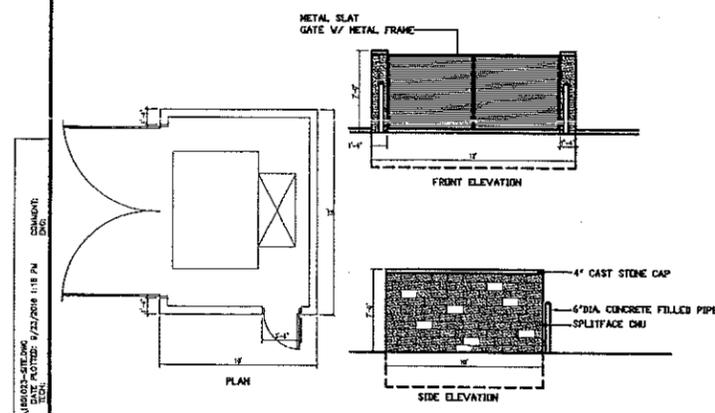
- ① Construct inlet openings with 15-inch #4 epoxy-coated bars at 8 inches on center. Embed bars a minimum of 3 inches into walls and top of all openings.
- ② Grade to inlet elevation on open sides. Grade to top elevation on closed sides.
- ③ Wall widths vary with pipe diameter. Provide 6 inches of wall width (minimum) each side of pipe opening. Minimum wall width is 36 inches. Maximum wall width is 72 inches.
- ④ Cast-in-place base shown. If base is precast integral with walls, the footprint of base is not required to extend beyond the outer edge of the walls.
- ⑤ Install four #4 diagonal bars at all pipe openings.



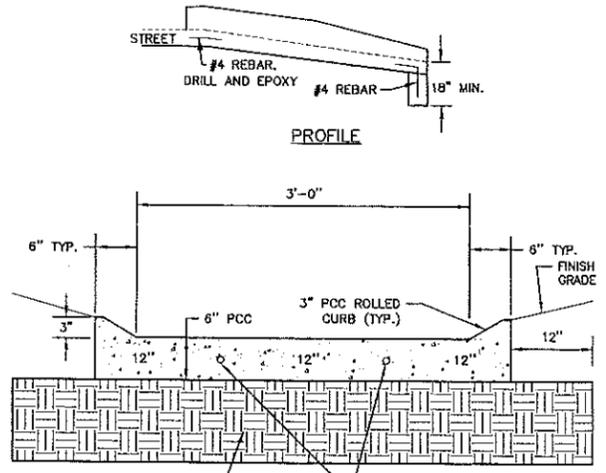
\* REFER TO SHEET 5 FOR LOCATION.



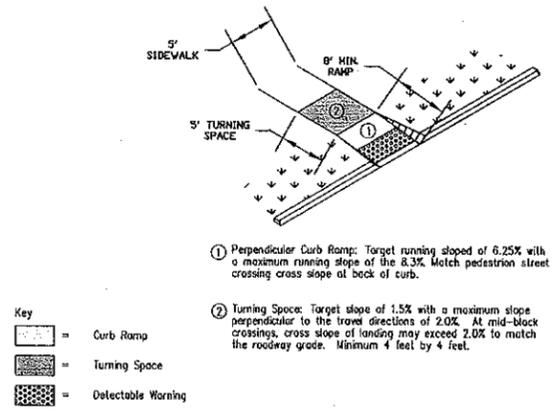
**ST-11 (DETENTION OUTLET)  
5'X5' SW-513 OPEN-SIDED AREA INTAKE**  
NOT TO SCALE



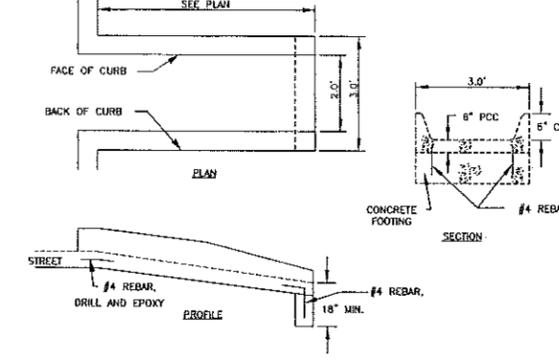
**TRASH ENCLOSURE**



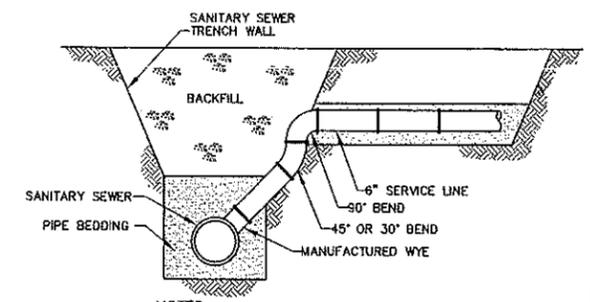
**CONCRETE FLUME DETAIL #2**



**PERPENDICULAR RAMP @ 6" CURB**

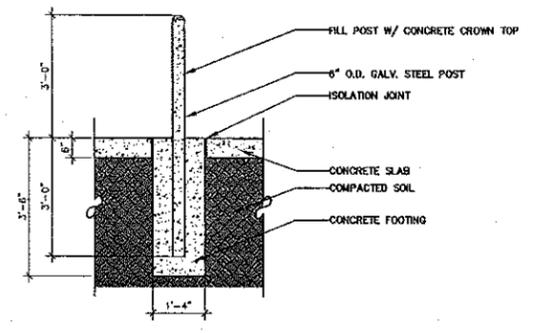


**CONCRETE FLUME DETAIL #1**

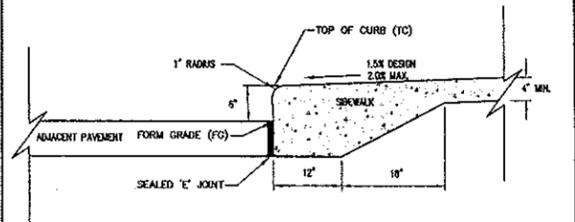


NOTES:  
1. USE FOR SERVICE CONNECTION WHEN SANITARY SEWER DEPTH EXCEEDS 12.0'.

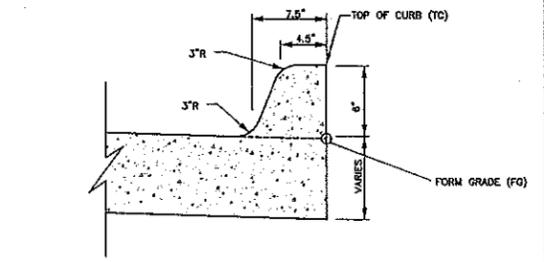
**SANITARY SEWER RISER**



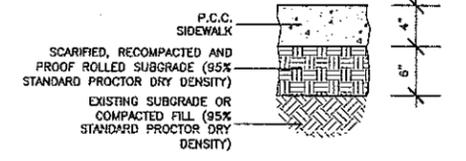
**TYPICAL SECTION: STEEL PIPE BOLLARD**



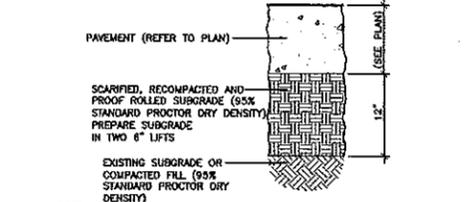
**CLASS 'A' INTEGRAL CURB AND SIDEWALK DETAIL**



**6" PCC INTEGRAL CURB**



**PCC SIDEWALK DETAIL**



NOTE:  
1. SUBGRADE PREPARATION SHALL EXTEND 24" BEYOND EDGE OF PAVEMENT OR BACK OF CURB, EXCEPT WHEN ABUTTING EXISTING PAVEMENT.

**12" SUBGRADE PREPARATION DETAIL**

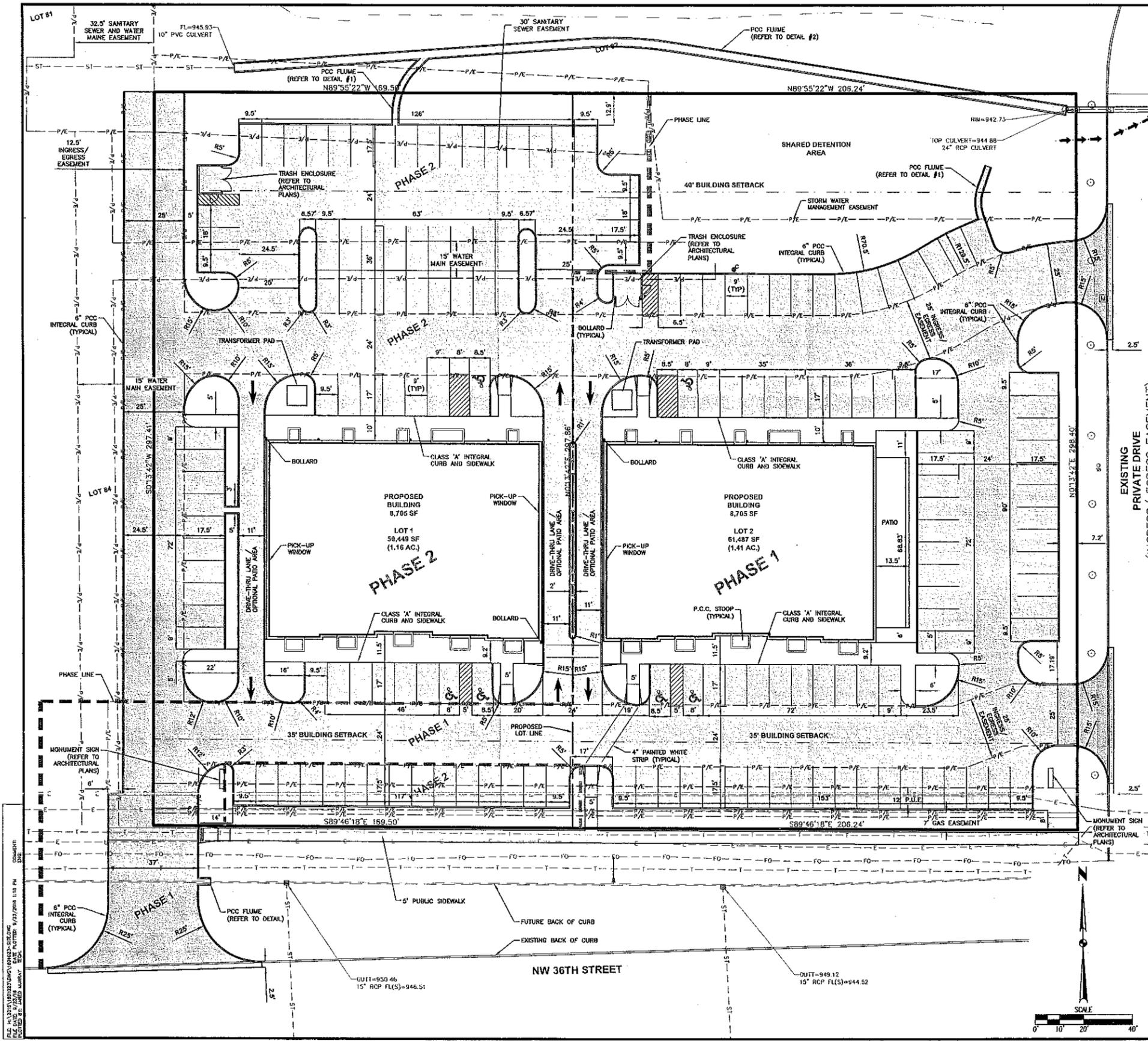
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REVISIONS	09/20/18
FINAL CITY SUBMITTAL	09/20/18
CITY SUBMITTAL #3	09/20/18
CITY SUBMITTAL #2	09/20/18
CITY SUBMITTAL #1	09/19/18

3405 S.E. CROSSROADS DRIVE, SUITE G  
GRIMES, IOWA 50111  
PHONE: (515) 369-4400 FAX: (515) 369-4410  
ENGINEER: RDR  
TECH:

**AUTUMN CREST RETAIL PLAZA**  
DETAILS

ANKENY, IOWA

**2** / **6**  
1601023

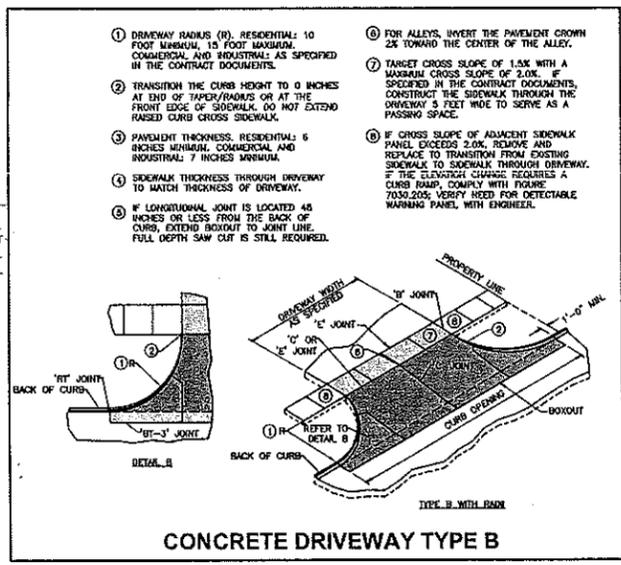


- ### GENERAL NOTES
1. THE MOST RECENT EDITION OF THE SDAS STANDARD SPECIFICATIONS AND ALL CITY SUPPLEMENTALS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.
  2. ALL WORK SHALL COMPLY WITH PROWAG AND ADA ACCESSIBILITY GUIDELINES.
  3. ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
  4. PRIOR TO ANY WORK AT THE SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER, ENGINEER, AND/OR ARCHITECT, AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
  5. ONE WEEK PRIOR TO CONSTRUCTION WITHIN CITY R.O.W. OR ANY CONNECTION TO PUBLIC SEWERS CONTRACTOR SHALL NOTIFY THE CITY'S CONSTRUCTION DIVISION.
  6. ALL CONSTRUCTION WITHIN PUBLIC R.O.W. / EASEMENTS, AND FOR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE CITY'S STANDARDS.
  7. ALL DIMENSIONS ARE TO BACK OF CURB, BUILDING FACE OR PROPERTY LINE UNLESS OTHERWISE NOTED.
  8. CONTRACTOR TO VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.
  9. PLACE 3/4" HIGH EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/SIDEWALKS AND BUILDING. PLACE 1/2" HIGH EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C. PAVEMENT.
  10. REMOVE ALL DEBRIS SPILLED INTO R.O.W. AT THE END OF EACH WORK DAY.
  11. ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
  12. DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE RIGHT OF WAY.
  13. THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR WILL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OF MATERIALS, STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE OWNER.
  14. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING EQUIPMENT ON THE PAVEMENT OR SIDEWALK.
  15. THE CONTRACTOR MAY BE REQUIRED TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY, AS DIRECTED BY THE ENGINEER OR THE CITY.
  16. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN SUPPLIERS AND SUBCONTRACTORS INVOLVED IN THE PROJECT, INCLUDING STAGING OF CONSTRUCTION MATERIALS.
  17. CONCRETE REMOVAL FOR DRIVEWAY APPROACHES SHALL BE REMOVED TO THE NEAREST TRANSVERSE JOINT. CONTRACTOR SHALL VERIFY REMOVAL LIMITS WITH CITY'S CONSTRUCTION INSPECTOR PRIOR TO ANY CONCRETE REMOVAL.
  18. ALL SCOUR STOP SHALL BE INSTALLED BY CERTIFIED CONTRACTOR ACCORDING TO SCOUR STOP PRODUCT SPECIFICATIONS. INSTALL SOD UNDER ALL SCOUR STOP AND TURF REINFORCEMENT MAT (TRM).
  19. ALL PERMITS AND ADDITIONAL FEES REQUIRED TO COMPLETE THE WORK SHALL BE INCLUDED IN THE CONTRACTOR BID.

- ### TRAFFIC CONTROL NOTES
1. ALL APPLICABLE CITY PERMITS, INCLUDING BUT NOT LIMITED TO CLOSURE PERMITS, SHALL BE OBTAINED PRIOR TO ANY CONSTRUCTION WITHIN CITY R.O.W. OR LANE CLOSURES.
  2. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
  3. PERMANENT SIGNING THAT CONVEYS A MESSAGE CONTRARY TO THE MESSAGE OF TEMPORARY SIGNING AND NOT APPLICABLE TO THE WORKING CONDITIONS SHALL BE COVERED BY THE CONTRACTOR WHEN DIRECTED BY THE CITY.
  4. THE CONTRACTOR SHALL COORDINATE HIS TRAFFIC CONTROL WITH OTHER CONSTRUCTION PROJECTS IN THE AREA.
  5. SIDEWALK/SHARED USE PATH CLOSED SIGNS REQUIRED FOR ALL SIDEWALK/SHARED USE PATH CLOSURES. SIGNAGE AND TEMPORARY PEDESTRIAN ACCESS ROUTE THROUGH THE CONSTRUCTION AREA SHALL MEET THE REQUIREMENTS OF PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG) SECTION 502 AND IOWA DOT DESIGN MANUAL, CHAPTER 12A-4.
  6. THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.
  7. ALL SIGNING AND LANE STRIPING WILL NEED TO COMPLY WITH MUTCD, MAINTENANCE AND REPLACEMENT OF THE SIGNING AND STRIPING WILL BE THE RESPONSIBILITY OF THE APPLICANT.

### PAVEMENT THICKNESS

1. SIDEWALKS	4" P.C.C.
2. SIDEWALK RAMPS	8" P.C.C.
3. DRIVE AISLES	7" P.C.C.
4. PARKING STALLS	6" P.C.C.
5. DUMPSTER ENCLOSURE & FRONT 20'	8" P.C.C.



DATE: 08/23/19  
 08/23/19  
 08/23/19  
 08/23/19  
 08/23/19

REVISIONS: FINAL CITY SUBMITTAL, CITY SUBMITTAL #3, CITY SUBMITTAL #2, CITY SUBMITTAL #1

3405 S.E. CROSSROADS DRIVE, SUITE G  
 GRIMES, IOWA 50111  
 PHONE: (515) 369-4400 FAX: (515) 369-4410

TECH: ENGINEER: RDR

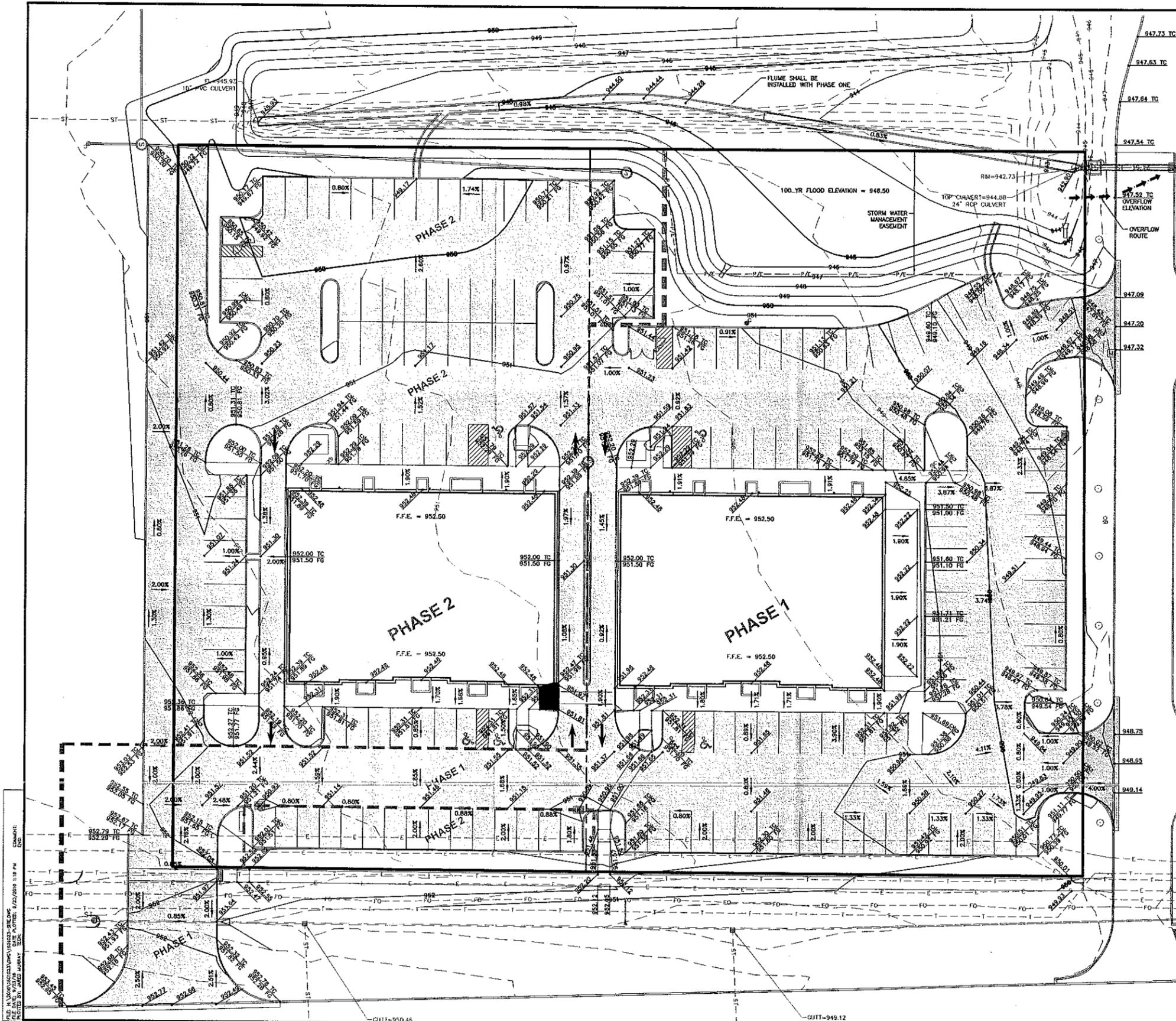
**ESA**  
 CIVIL DESIGN ADVANTAGE

ANKENY, IOWA

**AUTUMN CREST RETAIL PLAZA**  
 DIMENSION PLAN

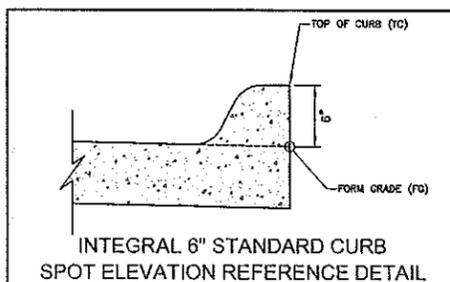
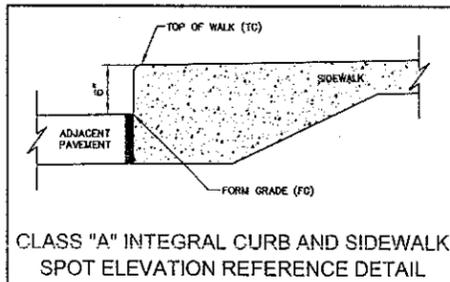
3 / 6

1601023



**GRADING NOTES**

1. PRIOR TO ANY GRADING, A COPY OF THE NPDES PERMIT SHALL BE PROVIDED TO THE CITY'S BUILDING DIVISION.
2. CONTRACTOR SHALL STRIP ALL DELETERIOUS MATERIAL. THE TOP 6" OF TOPSOIL IS TO BE STOCKPILED AND RESPREAD AFTER GRADING IS COMPLETE. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A SUITABLE TOPSOIL STOCKPILE SITE.
3. EXCAVATION SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND ALL CITY SUPPLEMENTALS, IF APPLICABLE.
4. WATCH EXISTING GRADES AT PROPERTY LINES AND/OR CONSTRUCTION LIMITS.
5. ALL SPOT ELEVATIONS ARE FORM GRADE (FG) OR TOP OF FINISHED SURFACES UNLESS OTHERWISE NOTED.
6. SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS.
7. SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.
8. THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN THE CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
9. THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE CONTROL TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
10. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN FOR DETAILS ON EROSION CONTROL.
11. FINAL FINISH GRADING TO BE APPROVED BY THE ARCHITECT AND CIVIL ENGINEER. MATCH EXISTING GRADES AT THE INTERFACE OF NEW AND EXISTING GRADES OR PAVING.
12. SIDEWALKS: MAINTAIN 1% MINIMUM AND 5% MAXIMUM LONGITUDINAL SLOPES ON ALL PAVED WALKWAYS. ALL WALKS TO HAVE 1.5% MAXIMUM TRANSVERSE SLOPE IN THE DIRECTION OF NATURAL DRAINAGE. SAW JOINT JOINTS AS SOON AS CONCRETE HAS SET. SAW CUTS TO BE 1/8" TO 1/4" WIDE; DEPTH: LONGITUDINAL 1/3, TRANSVERSE 1/4.
13. THE GRADING OF THE DETENTION FACILITY, INSTALLATION OF THE STORM SEWER SYSTEM, AND THE INSTALLATION OF THE ORFFICE PLATE SHALL BE COMPLETED AND FUNCTIONAL PRIOR TO ANY INCREASE IN IMPERVIOUS SURFACES WITHIN THE SITE OR THE PREVIOUSLY MENTIONED ITEMS SHALL BE GRADED/ INSTALLED AS SOON AS PRACTICAL.



ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF ANKENY SPECIFICATIONS AND STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS. THE CITY ENGINEER SHALL REVIEW AND APPROVE ALL GRADING PLANS. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES. THE CITY ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY CHANGES TO THE GRADING PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES. THE CITY ENGINEER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL SURVEY DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE SITE IN A SAFE AND SOUND CONDITION AT ALL TIMES. THE CITY ENGINEER SHALL BE RESPONSIBLE FOR APPROVING ALL GRADING PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS. THE CITY ENGINEER SHALL REVIEW AND APPROVE ALL GRADING PLANS. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES. THE CITY ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY CHANGES TO THE GRADING PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES. THE CITY ENGINEER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL SURVEY DATA.

DATE	08/22/16
REVISIONS	
FINAL CITY SUBMITTAL #3	
CITY SUBMITTAL #2	
CITY SUBMITTAL #1	

3405 S.E. CROSSROADS DRIVE, SUITE G  
 GRIMES, IOWA 50111  
 PHONE: (515) 369-4400 FAX: (515) 369-4410

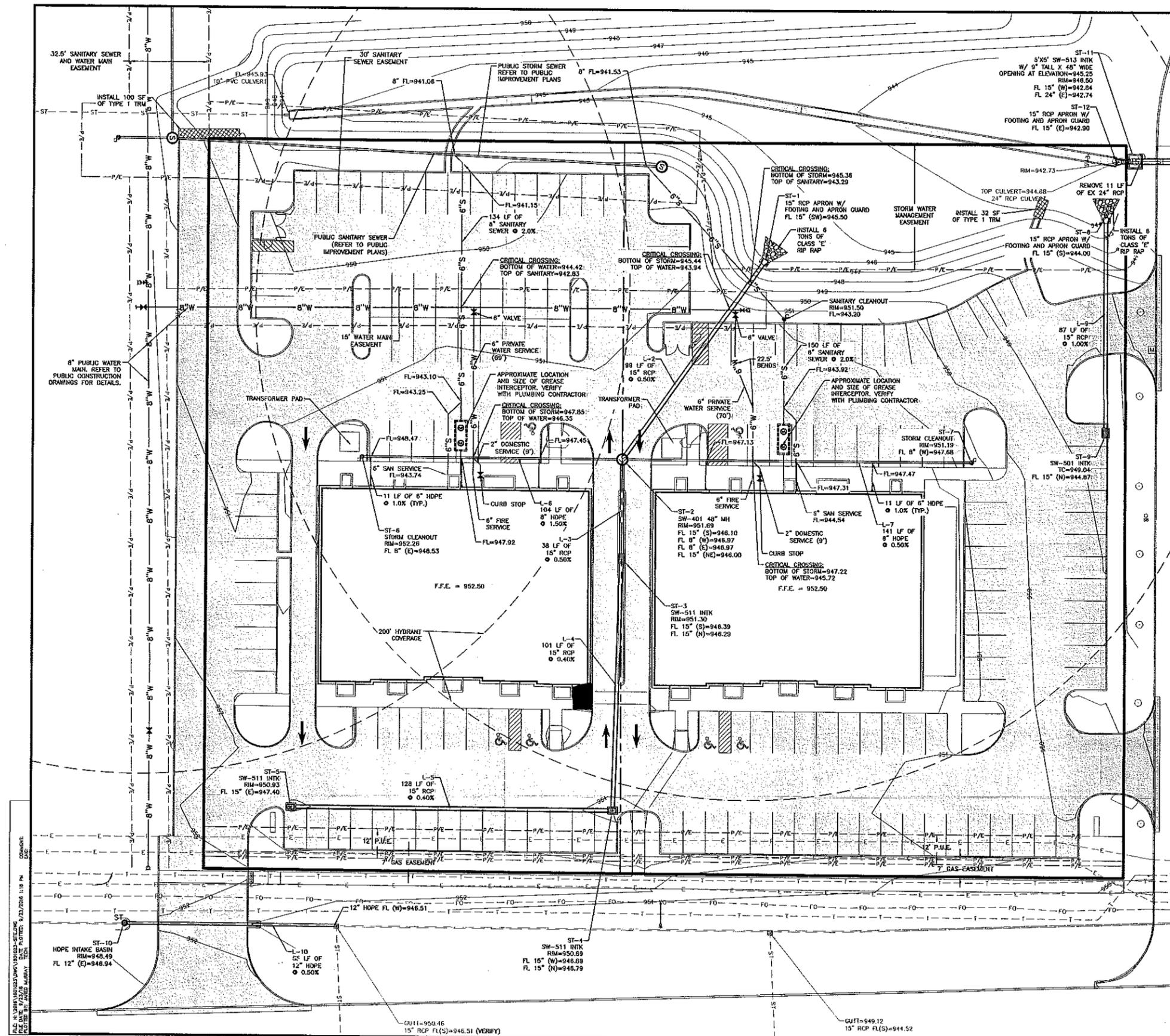
**EA**  
 CIVIL DESIGN ADVANTAGE

**4** AUTUMN CREST RETAIL PLAZA  
 GRADING PLAN

ANKENY, IOWA

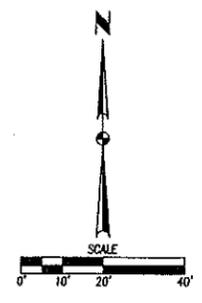
TECH: RDR  
 ENGINEER: RDR

1601023



- ### UTILITY NOTES
- REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR UTILITY SERVICE SIZES AND EXACT LOCATIONS. REFER TO ELECTRICAL PLANS FOR ELECTRIC AND TELEPHONE SERVICE CONSTRUCTION DETAILS. REFER TO MECHANICAL PLANS FOR GAS SERVICE CONSTRUCTION DETAILS.
  - FIELD VERIFY ELEVATIONS AND LOCATIONS OF ALL CONNECTIONS TO EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
  - PROVIDE TEMPORARY SUPPORT FOR EXISTING UTILITY LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETE.
  - BACKFILL ALL UTILITY TRENCHES ACCORDING TO THE 2010 EDITION OF THE SDAS STANDARD SPECIFICATIONS AND ALL CITY SUPPLEMENTALS. MAINTAIN A MINIMUM OF 5.5' COVER OVER ALL WATERMANS.
  - ALL UTILITIES SHALL BE STUBBED TO 5 FEET FROM BUILDINGS. REFER TO MEP PLANS FOR DESIGN FROM 5' OUTSIDE OF BUILDING FACE.
  - ADJUST ALL MANHOLES AND INTAKES TO FINISHED GRADES.
  - ALL SANITARY SEWER AND WATER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY'S PLUMBING CODE.
  - 18" MINIMUM VERTICAL CLEARANCE BETWEEN STORM SEWER AND SANITARY SEWER PIPES. 18" MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER AND WATER MAIN.
  - MAINTAIN A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATERMANS.
  - 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 LOCATIONS 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. THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT 800-292-8999 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
  - ALL WATERMAIN WORK, PUBLIC OR PRIVATE SHALL BE DONE IN ACCORDANCE WITH SDAS STANDARD SPECIFICATIONS AND THE CITY'S STANDARD CONSTRUCTION SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
  - THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
  - PRIVATE UTILITIES TO BE INSTALLED PER THE CITY'S STANDARD CONSTRUCTION SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, THE 2010 EDITION OF SDAS AND THE 2012 UNIFORM PLUMBING CODE. CONTACT BUILDING INSPECTION A MINIMUM OF 24 HOURS IN ADVANCE FOR UTILITY INSTALLATION INSPECTIONS.
  - OWNER IS RESPONSIBLE FOR MAINTENANCE OF PRIVATE RETENTION FACILITIES AND PRIVATE UTILITIES.
  - CONTRACTOR SHALL PREVENT ENTRY OF MUD, DIRT, DEBRIS AND OTHER MATERIAL INTO NEW AND EXISTING SEWER SYSTEMS. SHOULD ANY CONTAMINATION OCCUR DURING CONSTRUCTION, THE CONTRACTOR SHALL CLEAN AT NO COST TO THE OWNER. INSTALL SILT FENCE AT ALL PERMANENT STORM SEWER INLETS.
  - STORM SEWER PIPE LENGTH INCLUDES APRON LENGTH.
  - PROVIDE 8" (Ø) HOPE ROOF DRAIN CONNECTIONS TO WITHIN 5' OF BUILDING FLOW LINE AT END OF STUB SHALL BE A MINIMUM OF 3.5' BELOW THE F.F.E. COORDINATE WITH BUILDING PLANS AND CONTRACTOR.

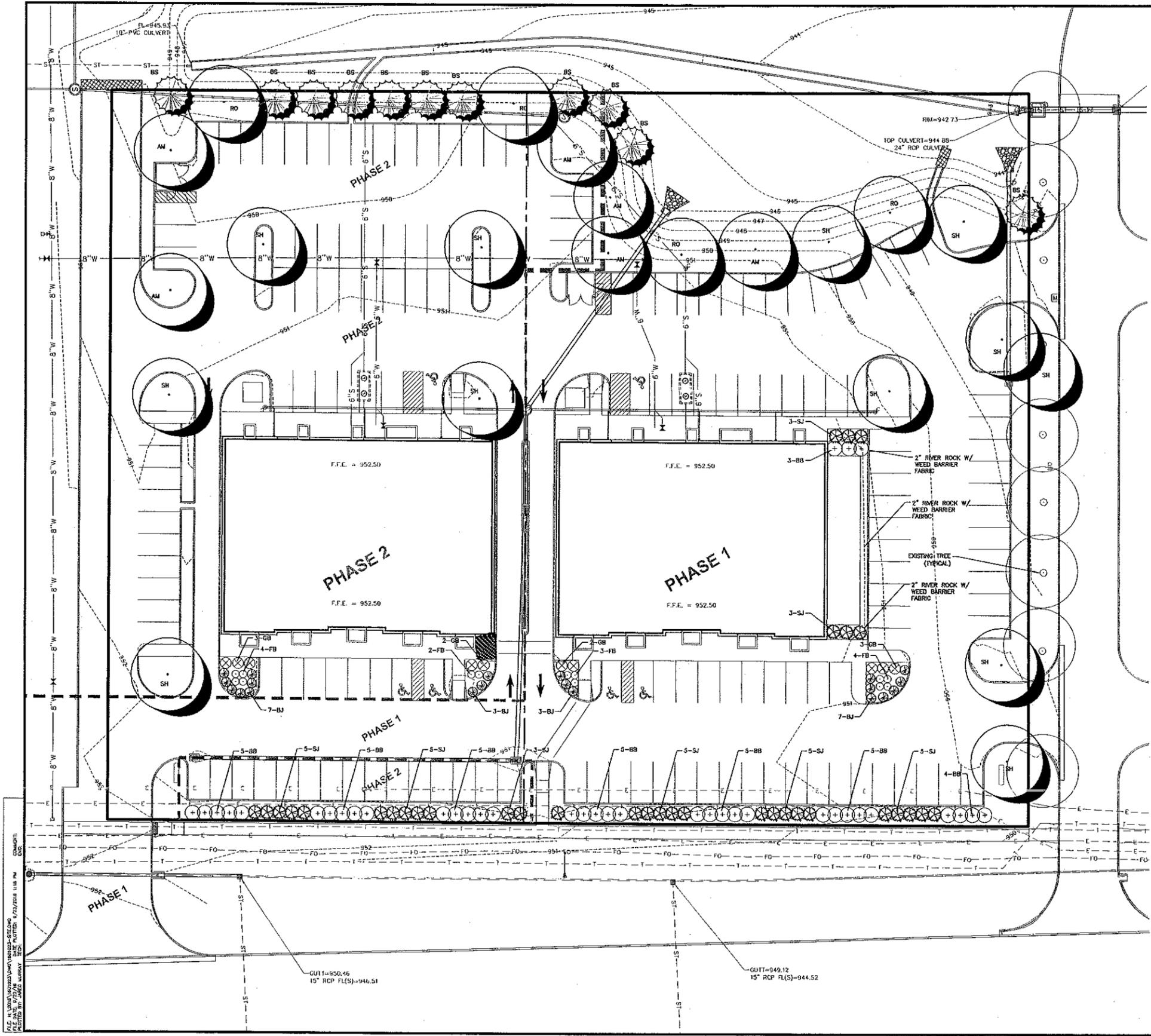
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 DRAWN BY: J. HARRIS  
 CHECKED BY: J. HARRIS  
 DATE PLOTTED: 9/23/2014 11:18 AM  
 PLOTTER: HP DesignJet 500



DATE	REVISIONS
08/27/14	
09/23/14	
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09/23/14	

3405 S.E. CROSSROADS DRIVE, SUITE G  
 GRIMES, IOWA 50111  
 PHONE: (515) 369-4400 FAX: (515) 369-4410  
 CIVIL DESIGN ADVANTAGE  
 ANKENY, IOWA  
 ENGINEER: RDR  
 TECH:

**5** AUTUMN CREST RETAIL PLAZA  
**6** UTILITY PLAN  
 1601023



**LANDSCAPE NOTES**

1. LOCATE ALL UTILITIES BEFORE ANY PLANTING BEGINS.
2. THE MOST RECENT EDITION OF THE SDAS STANDARD SPECIFICATIONS AND ALL CITY SUPPLEMENTALS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.
3. TYPE, SIZE AND QUALITY OF PLANT MATERIAL SHALL CONFORM TO THE MOST CURRENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1
4. ALL PLANT MATERIAL SHALL BE HEALTHY SPECIMENS WITHOUT DEFORMITIES, WOUNDS AND OPEN SPACES, WITH WELL DEVELOPED BRANCH AND ROOT SYSTEMS; TRUE TO HEIGHT, SHAPE AND CHARACTER OF GROWTH OF THE SPECIES OR VARIETY.
5. SEED OR SOO ALL DISTURBED AREAS AS DIRECTED BY OWNER.
6. BACKFILL TO TOP OF CURB. (MINUS 1 1/2" FOR SOO, IF REQUIRED.)
7. WEED PREVENTER (PRE-EMERGENT) SHALL BE SPREAD OVER SOIL AFTER PLANTING AND BEFORE MULCHING IN ALL PLANTING BEDS PER MANUFACTURER'S RECOMMENDATIONS.
8. SHREDDED HARDWOOD MULCH SHALL BE PLACED AROUND ALL TREES, SHRUBS AND IN ALL PLANTING BEDS TO A (MIN) DEPTH OF 3".
9. ALL EDGING SHALL BE SPADE CUT EDGE.
10. PLANT QUANTITIES ARE SHOWN FOR INFORMATION ONLY, THE DRAWING SHALL PREVAIL IF ANY CONFLICTS ARISE.
11. ALL DEBRIS STILLED IN THE PUBLIC RIGHT-OF-WAY SHALL BE PICKED UP BY THE CONTRACTOR AT THE END OF EACH WORK DAY.
12. CONTRACTOR SHALL WARRANTY ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF INSTALLATION.
13. CONTRACTOR SHALL PROVIDE IRRIGATION DESIGN TO OWNER, IF REQUESTED, FOR APPROVAL.

**LOT 1 & 2  
OPEN SPACE/ LANDSCAPE REQUIREMENTS**

OPEN SPACE REQUIREMENTS  
 SITE AREA (LOT 37) = 111,990 SF  
 OPEN SPACE REQUIRED (20%) = 22,398 SF

OPEN SPACE PLANTING REQUIREMENTS  
 (2 TREES & 6 SHRUBS PER 3,000 SF OF REQUIRED OPEN SPACE)

REQUIRED TREES	= 15 TREES
SHRUBS	= 45 SHRUBS
PROVIDED TREES	= 15 TREES
SHRUBS	= 52 SHRUBS

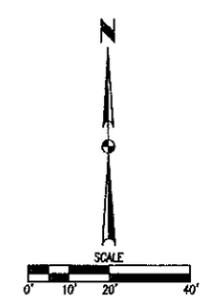
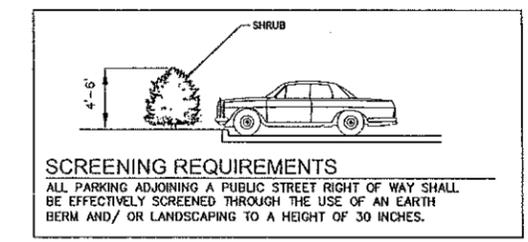
**PAVEMENT SHADING REQUIREMENTS**

20% OF ALL PAVEMENT MUST BE SHADED

PARKING LOT	= 61,673 SF
20% OF PAVEMENT	= 12,335 SF
12,335 SF / 706 (30' DIA. TREE)	= 18 TREES
TREES PROVIDED	= 18 TREES

**PLANT SCHEDULE**

QUANTITY	OVERSTORY TREES	SIZE (DDB)
AN 15	AUTUMN PLAIN MAPLE	2" CAL BAB
SH 12	SHADEMASTER HONEYLOCUST	2" CAL BAB
RO 4	RED OAK	2" CAL BAB
QUANTITY	EVERGREEN TREES	SIZE (DDB)
RS 11	COLORADO BLUE SPRUCE	8" HT. BAB
QUANTITY	SHRUBS	SIZE (DDB)
BB 37	DWARF BURNING BUSH	3 GAL COBIT
GO 10	GOLDEN BARBERY	3 GAL COBIT
SH 30	SEA GREEN JUMPER	3 GAL COBIT
BU 20	BUFFALO BURST	3 GAL COBIT
FB 13	FERNLEAF BUCKTHORN	3 GAL COBIT



SEE ALL SANITATION/SEWERAGE DETAILS ON SHEETS 150-151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.