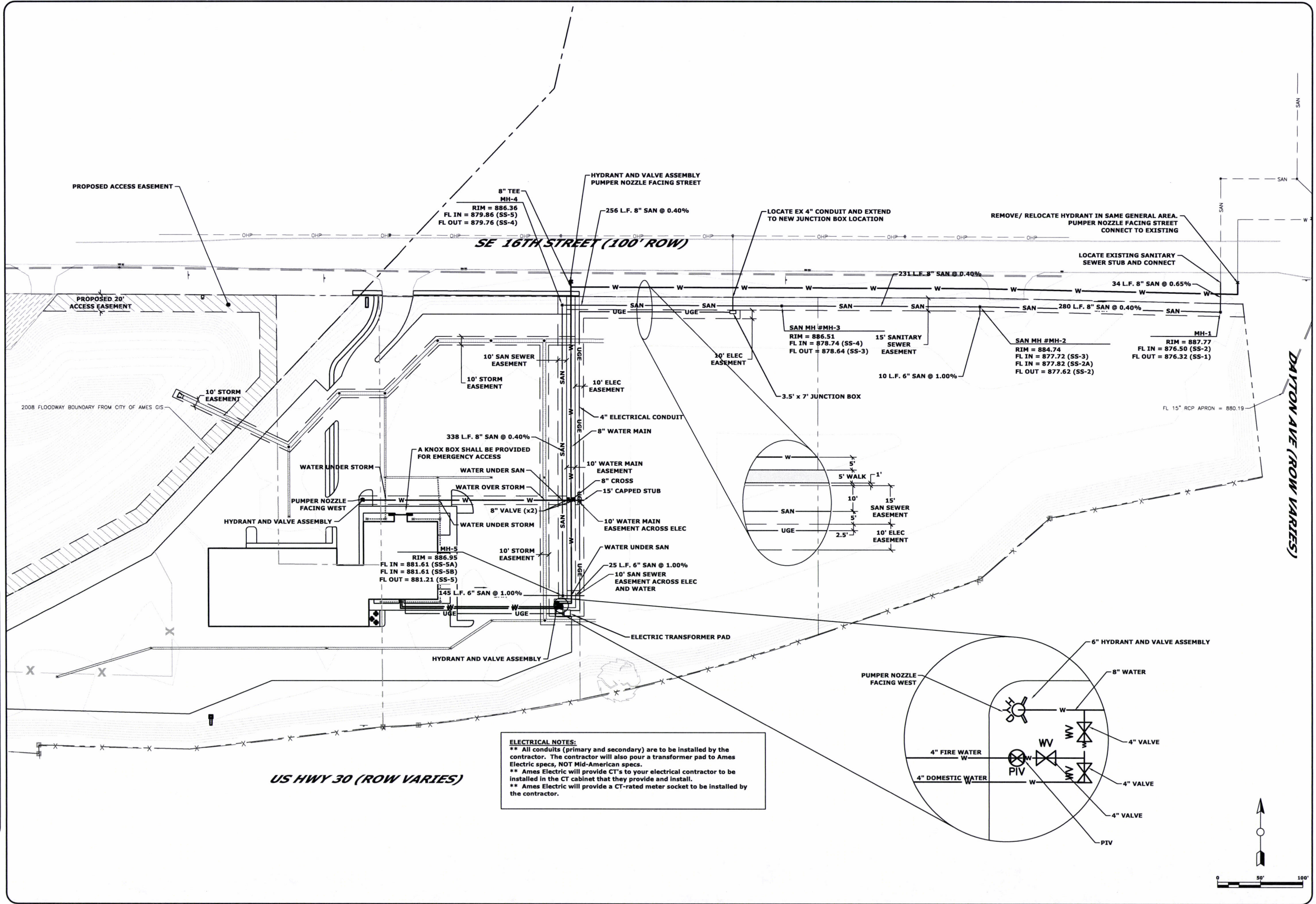
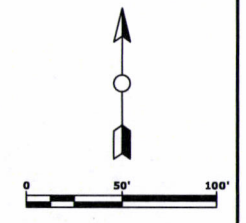


DRAWING FILENAME: K:\proj\50005174-12a\cat_dealership\dwg\5174-12a\UTILITY PACKAGE.dwg
 PLOT STYLE TABLE: C4.0
 LAYER MGR NAME: FOXENR\Scale.ctb

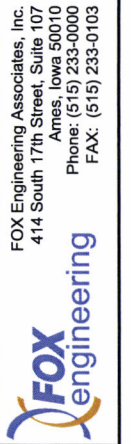


ELECTRICAL NOTES:
 ** All conduits (primary and secondary) are to be installed by the contractor. The contractor will also pour a transformer pad to Ames Electric specs, NOT Mid-American specs.
 ** Ames Electric will provide CT's to your electrical contractor to be installed in the CT cabinet that they provide and install.
 ** Ames Electric will provide a CT-rated meter socket to be installed by the contractor.



REVISION	DATE	BY	DATE
DESIGNED:	08/12	SLK	08/12
DRAWN:	08/12	SRS	08/12
CHECKED:			
LAST UPDATE: 08/14/12			

FOX Engineering Associates, Inc.
 414 South 17th Street, Suite 107
 Ames, Iowa 50010
 Phone: (515) 233-0000
 FAX: (515) 233-0103

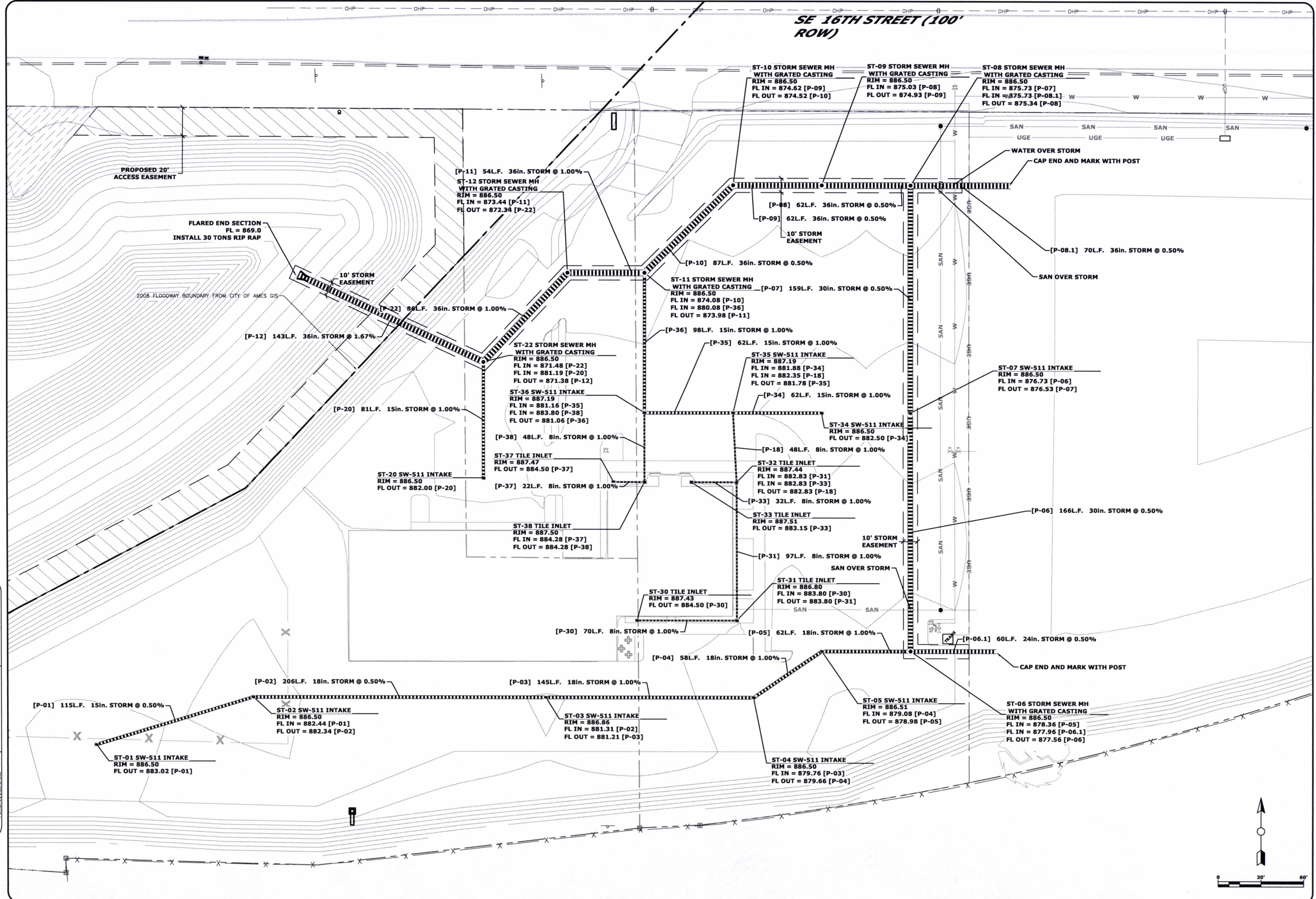


UTILITY PLAN (SAN AND WATER)
 DEERY BROTHERS SITE PLAN
 SE 16TH AND DAYTON
 AMES, IOWA

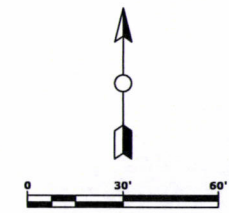
PROJECT NO.
5174-12A

SHEET
C4.0

SE 16TH STREET (100' ROW)



DRAWING FILENAME
K:\proj\5000\5174-12a.ctb
PLOT STYLE TABLE
LAYER MGR NAME
FoxGrayScale.ctb
C4.1



REVISION	DATE	BY	DATE
DESIGNED	08/12	SLR	08/12
DRAWN	08/12	SRS	08/12
CHECKED			
LAST UPDATE: 08/14/12			

FOX Engineering Associates, Inc.
414 South 17th Street, Suite 107
Ames, Iowa 50010
Phone: (515) 233-0000
FAX: (515) 233-0103

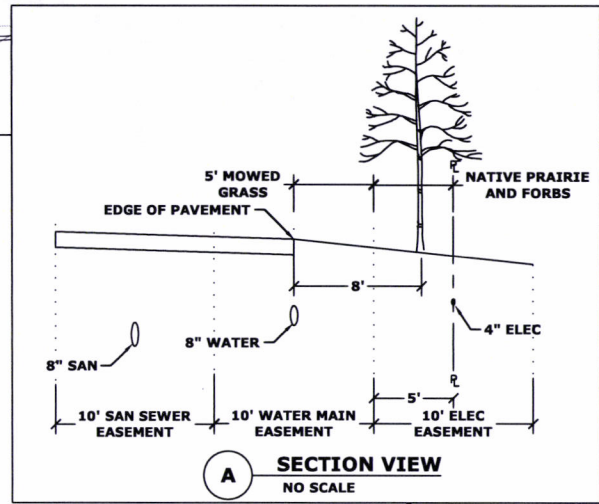
FOX Engineering

UTILITY PLAN (STORM SEWER)
DEERY BROTHERS SITE PLAN
SE 16TH AND DAYTON
AMES, IOWA

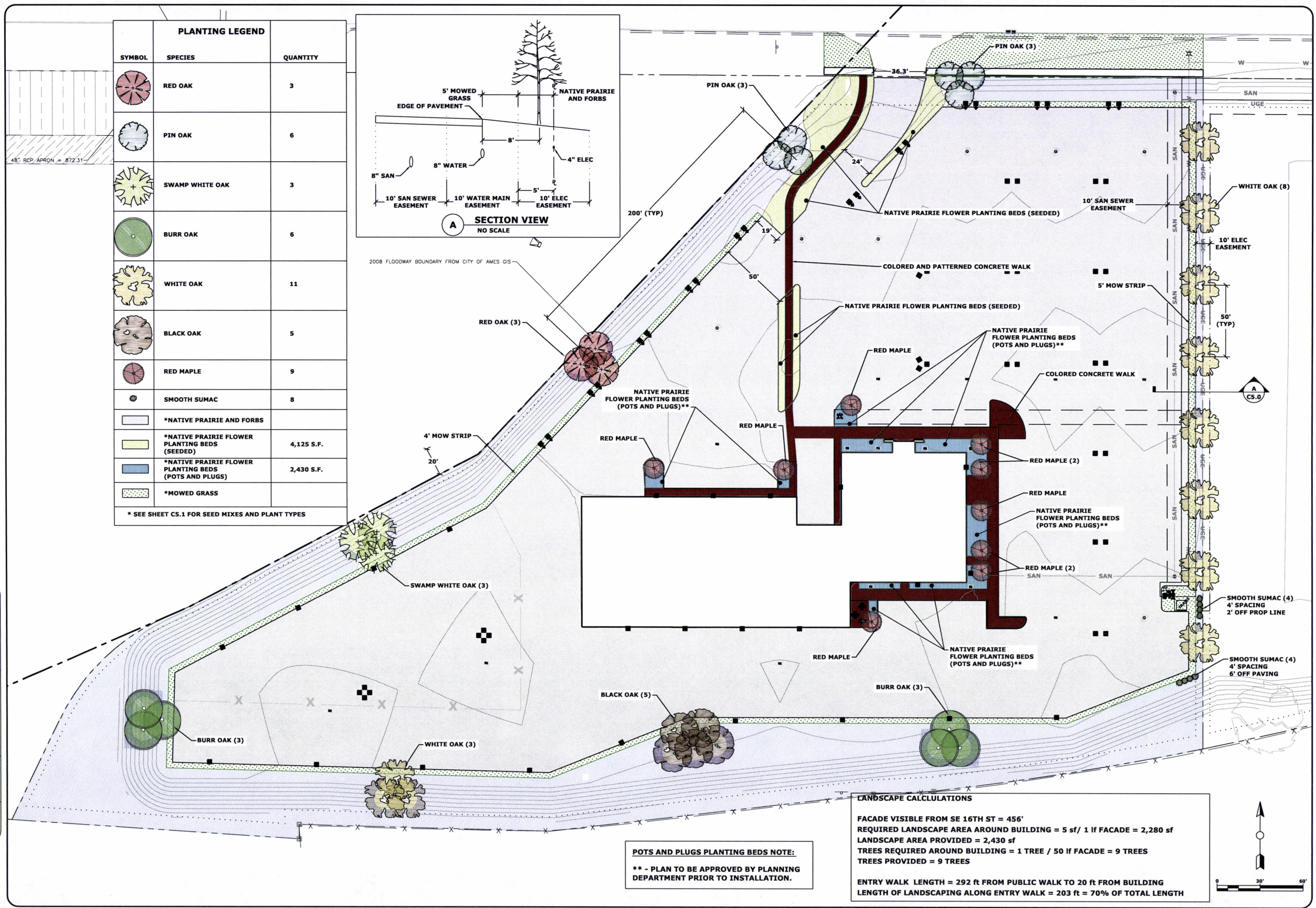
PROJECT NO.
5174-12A

SHEET
C4.1

PLANTING LEGEND		
SYMBOL	SPECIES	QUANTITY
	RED OAK	3
	PIN OAK	6
	SWAMP WHITE OAK	3
	BURR OAK	6
	WHITE OAK	11
	BLACK OAK	5
	RED MAPLE	9
	SMOOTH SUMAC	8
	*NATIVE PRAIRIE AND FORBS	
	*NATIVE PRAIRIE FLOWER PLANTING BEDS (SEEDED)	4,125 S.F.
	*NATIVE PRAIRIE FLOWER PLANTING BEDS (POTS AND PLUGS)	2,430 S.F.
	*MOWED GRASS	
* SEE SHEET C5.1 FOR SEED MIXES AND PLANT TYPES		

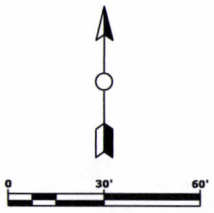


K:\p\000\5174-12a_cnr_deerbrothers\Drawings\Civil\5174-12a_DEERY SITEPLAN.dwg
 PLOT STYLE TABLE
 LAYER MGR NAME
 FoxGrayScale.ctb
 C5.0



POTS AND PLUGS PLANTING BEDS NOTE:
 ** - PLAN TO BE APPROVED BY PLANNING DEPARTMENT PRIOR TO INSTALLATION.

LANDSCAPE CALCULATIONS
 FACADE VISIBLE FROM SE 16TH ST = 456'
 REQUIRED LANDSCAPE AREA AROUND BUILDING = 5 sf / 1 lf FACADE = 2,280 sf
 LANDSCAPE AREA PROVIDED = 2,430 sf
 TREES REQUIRED AROUND BUILDING = 1 TREE / 50 lf FACADE = 9 TREES
 TREES PROVIDED = 9 TREES
 ENTRY WALK LENGTH = 292 ft FROM PUBLIC WALK TO 20 ft FROM BUILDING
 LENGTH OF LANDSCAPING ALONG ENTRY WALK = 203 ft = 70% OF TOTAL LENGTH



REVISION	DATE	BY	DATE	DESIGNED	DRAWN	CHECKED	LAST UPDATE
							08/14/12
PROJECT NO. 5174-12A SHEET C5.0							
SITE LANDSCAPING PLAN DEERY BROTHERS' MOTORS SITE PLAN SE 16TH AND DAYTON AMES, IOWA							
FOX Engineering Associates, Inc. 414 South 17th Street, Suite 107 Ames, Iowa 50010 Phone: (515) 233-0000 FAX: (515) 233-0103							

NATIVE PRAIRIE FLOWER PLANTING BEDS (SEEDED)

Genus	Species	Common Name	Seeds/oz.
Amorpha	canescens	Lead Plant	16,000
Anaphalis	margaritacea	Pearly Everlasting	218,000
Andropogon	gerardii	Big Bluestem	10,000
Andropogon	scoparius	Little Bluestem	15,000
Anemone	virginiana	Tall Thimbleweed	28,000
Aquilegia	canadensis	Columbine	38,000
Artemisia	ludoviciana	Prairie Sage	250,000
Asclepias	tuberosa	Butterfly Weed	4,300
Asclepias	syriaca	Common Milkweed	4,000
Aster	ericoides	Heath Aster	200,000
Aster	azureus	Sky Blue Aster	80,000
Aster	oblongifolius	Aromatic Aster	51,000
Aster	sericeus	Silky Aster	26,000
Aster	laevis	Smooth Blue Aster	55,000
Astragalus	canadensis	Canadian Milk Vetch	17,000
Baptisia	alba	White Wild Indigo	1,700
Bouteloua	curtipendula	Side-oats Grama	6,000
Carex	vulpinoidea	Brown Fox Sedge	100,000
Cassia	fasciculata	Partridge Pea	2,700
Coreopsis	tripteris	Tall Coreopsis	14,000
Desmanthus	illinoensis	Illinois Bundle Flower	4,200
Desmodium	canadense	Showy Tick Trefoil	5,500
Echinacea	pallida	Pale Purple Coneflower	5,200
Elymus	canadensis	Canada Wild Rye	5,200
Eryngium	yuccifolium	Rattlesnake Master	7,500
Gentiana	flavida	Cream Gentian	140,000
Helopsis	heliathoides	Early Sunflower	6,300
Heuchera	richardsonii	Prairie Alumroot	700,000
Hypericum	punctatum	Dotted St. John's Wort	580,000
Liatris	aspera	Button Blazing Star	16,000
Monarda	punctata	Spotted Bee Balm	90,000
Monarda	fistulosa	Wild Bergamot	70,000
Oenothera	biennis	Common Evening Primrose	90,000
Panicum	virgatum	Switch Grass	14,000
Penstemon	digitalis	Foxglove Beardtongue	130,000
Petalostemum	candidum	White Prairie Clover	19,000
Petalostemum	purpureum	Purple Prairie Clover	15,000
Potentilla	arguta	Prairie Cinquefoil	230,000
Pycnanthemum	tenuifolium	Slender Mountain Mint	378,000
Pycnanthemum	virginianum	Mountain Mint	220,000
Ratibida	pinnata	Yellow Coneflower	30,000
Rudbeckia	subtomentosa	Sweet Black-eyed Susan	43,000
Rudbeckia	triloba	Brown-eyed Susan	34,000
Rudbeckia	hirta	Black-eyed Susan	92,000
Ruellia	humilis	Wild Petunia	5,200
Silphium	integrifolium	Rosin Weed	1,200
Silphium	laciniatum	Compass Plant	660
Solidago	nemorals	Old Field Goldenrod	300,000
Solidago	rigida	Stiff Goldenrod	41,000
Solidago	speciosa	Showy Goldenrod	95,000
Sorghastrum	nutans	Indian Grass	12,000
Sporobolus	asper	Rough Dropseed	30,000
Sporobolus	heterolepis	Prairie Dropseed	16,000
Teucrium	canadense	Germander	20,000
Tradescantia	bracteata	Prairie Spiderwort	10,000
Verbena	stricta	Hoary Vervain	28,000
Veronicastrum	virginicum	Culver's Root	800,000
Zizia	aptera	Heart-leaf Golden Alexanders	12,000
Zizia	aurea	Golden Alexanders	11,000

NATIVE PRAIRIE AND FORBS (SUNNY AREAS)

Genus	Species	Common Name	Seeds/oz.
Amorpha	canescens	Lead Plant	16,000
Anaphalis	margaritacea	Pearly Everlasting	218,000
Andropogon	gerardii	Big Bluestem	10,000
Andropogon	scoparius	Little Bluestem	15,000
Anemone	virginiana	Tall Thimbleweed	28,000
Aquilegia	canadensis	Columbine	38,000
Artemisia	ludoviciana	Prairie Sage	250,000
Asclepias	tuberosa	Butterfly Weed	4,300
Asclepias	syriaca	Common Milkweed	4,000
Aster	ericoides	Heath Aster	200,000
Aster	azureus	Sky Blue Aster	80,000
Aster	oblongifolius	Aromatic Aster	51,000
Aster	sericeus	Silky Aster	26,000
Aster	laevis	Smooth Blue Aster	55,000
Astragalus	canadensis	Canadian Milk Vetch	17,000
Baptisia	alba	White Wild Indigo	1,700
Bouteloua	curtipendula	Side-oats Grama	6,000
Carex	vulpinoidea	Brown Fox Sedge	100,000
Cassia	fasciculata	Partridge Pea	2,700
Coreopsis	tripteris	Tall Coreopsis	14,000
Desmanthus	illinoensis	Illinois Bundle Flower	4,200
Desmodium	canadense	Showy Tick Trefoil	5,500
Echinacea	pallida	Pale Purple Coneflower	5,200
Elymus	canadensis	Canada Wild Rye	5,200
Eryngium	yuccifolium	Rattlesnake Master	7,500
Gentiana	flavida	Cream Gentian	140,000
Helopsis	heliathoides	Early Sunflower	6,300
Heuchera	richardsonii	Prairie Alumroot	700,000
Hypericum	punctatum	Dotted St. John's Wort	580,000
Liatris	aspera	Button Blazing Star	16,000
Monarda	punctata	Spotted Bee Balm	90,000
Monarda	fistulosa	Wild Bergamot	70,000
Oenothera	biennis	Common Evening Primrose	90,000
Panicum	virgatum	Switch Grass	14,000
Penstemon	digitalis	Foxglove Beardtongue	130,000
Petalostemum	candidum	White Prairie Clover	19,000
Petalostemum	purpureum	Purple Prairie Clover	15,000
Potentilla	arguta	Prairie Cinquefoil	230,000
Pycnanthemum	tenuifolium	Slender Mountain Mint	378,000
Pycnanthemum	virginianum	Mountain Mint	220,000
Ratibida	pinnata	Yellow Coneflower	30,000
Rudbeckia	subtomentosa	Sweet Black-eyed Susan	43,000
Rudbeckia	triloba	Brown-eyed Susan	34,000
Rudbeckia	hirta	Black-eyed Susan	92,000
Ruellia	humilis	Wild Petunia	5,200
Silphium	integrifolium	Rosin Weed	1,200
Silphium	laciniatum	Compass Plant	660
Solidago	nemorals	Old Field Goldenrod	300,000
Solidago	rigida	Stiff Goldenrod	41,000
Solidago	speciosa	Showy Goldenrod	95,000
Sorghastrum	nutans	Indian Grass	12,000
Sporobolus	asper	Rough Dropseed	30,000
Sporobolus	heterolepis	Prairie Dropseed	16,000
Teucrium	canadense	Germander	20,000
Tradescantia	bracteata	Prairie Spiderwort	10,000
Verbena	stricta	Hoary Vervain	28,000
Veronicastrum	virginicum	Culver's Root	800,000
Zizia	aptera	Heart-leaf Golden Alexanders	12,000
Zizia	aurea	Golden Alexanders	11,000

NATIVE PRAIRIE AND FORBS (SHADED AREAS)

Genus	Species	Common Name	Seeds/oz.
Carex	rosea	Curly-styled Wood Sedge	53,000
Panicum	virgatum	Switch Grass PLS	14,000
Carex	brevior	Plains Oval Sedge	29,000
Carex	molesta	Field Oval Sedge	25,000
Carex	muskingumensis	Palm Sedge	7,500
Carex	sprengelii	Long-beaked Sedge	10,000
Carex	laeviconica	Long-toothed Lake Sedge	7,500
Sporobolus	heterolepis	Northern Dropseed PLS	16,000
Koeleria	crystata	June Grass PLS	200,000
Elymus	villosus	Silky Wild Rye PLS	5,500
Sporobolus	asper	Rough Dropseed	30,000
Hystrix	patula	Bottlebrush Grass PLS	7,600
Elymus	virginicus	Virginia Wild Rye PLS	4,200
Andropogon	scoparius	Little Bluestem PLS	15,000
Bouteloua	curtipendula	Side-oats Grama PLS	6,000


Plant List for Landscaping Adjacent to the Building
Potential list of plants that will be used.
Variety based on availability and time of planting.
Detailed plan to be reviewed by the City prior to installation.

scientific name	common name	ht	sun			moisture			shade	sun
			S	W		M	DM	D		
Hystrix patula	Bottlebrush grass	3'		S	W		M	DM	98	
Schizachyrium scoparium	Little bluestem	3'	P	S			M	DM		294
Sporobolus heterolepis	Prairie dropseed	3'	P	S		WM	M	DM		98
Amorpha canescens	Lead plant	3'	P	S			WM	M	DM	196
Anemone canadensis	Canada anemone	1'	P	S			WM	M		196
Aquilegia canadensis	Columbine	2'	P	S	W		M	DM	294	
Artemisia ludoviciana	Prairie sage	3'	P	S						98
Asclepias tuberosa	Butterfly weed	2'	P	S			M	DM		294
Aster azureus	Sky blue aster	3'	P	S			M	DM		196
Aster oblongifolius	Aromatic aster	2'	P					DM		98
Baptisia leucophaea	Cream indigo	2'	P	S			M	DM		98
Coreopsis palmata	Prairie coreopsis	2'	P	S			M	DM		98
Echinacea pallida	Pale purple coneflower	3'	P	S			M	DM		98
Euphorbia corollata	Flowering spurge	3'	P	S			M	DM		98
Liatris punctata	Dotted blazingstar	2'	P	S				DM		98
Liatris scariosa	Northern blazingstar	2'	P	S			M	DM		98
Liatris squarrosa	Scaly blazingstar	2'	P	S				DM		98
Oenothera macrocarpa	Missouri evening primrose	1'	P	S				DM		196
Oxytropis lambertii	Locoweed	1'	P					DM		98
Penstemon cobaea	Showy beardtongue	2'	P	S				DM		98
Penstemon grandiflorum	Large-flowered beardtongue	2'	P	S				DM		196
Phlox pilosa	Prairie phlox	2'	P	S				DM		106
Ruellia humilis	Wild petunia	1'	P	S			M	DM		98
Solidago nemoralis	Gray goldenrod	2'	P	S				DM		98
Solidago ulmifolia	Elm-leaved goldenrod	3'		S	W		M	DM	98	
Zizia aptera	Heart-leaved golden alexanders	2'	P	S			M	DM		98
									882	2752

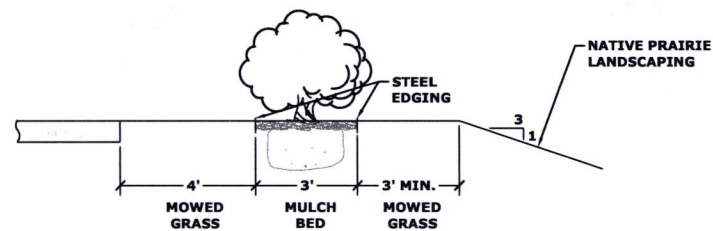
DRAWING FILENAME: K:\p\15000\5174-12a.cdw
 PLOT STYLE TABLE: c:\p\15000\5174-12a.ctb
 LAYER MGR NAME: FOXENR
 LAYOUT NAME: C5.1
 FOXENR\Scale.ctb

DATE	BY	DESIGNED	DRAWN	CHECKED	LAST UPDATE
07/12	SLK				07/25/12
07/12	SAS				

REVISION	DATE	DESCRIPTION

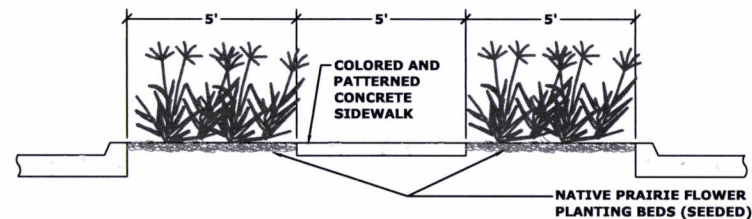
FOX Engineering Associates, Inc.
 414 South 17th Street, Suite 107
 Ames, Iowa 50010
 Phone: (515) 233-0000
 FAX: (515) 233-0103


LANDSCAPING SPECIES TABLES
 DEERY BROTHERS SITE PLAN
 SE 16TH AND DAYTON
 AMES, IOWA



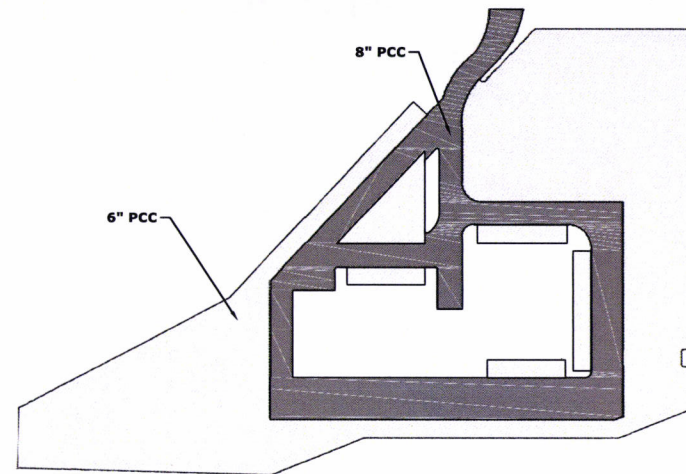
TYPICAL SHRUB PLANTING DETAIL

NOT TO SCALE



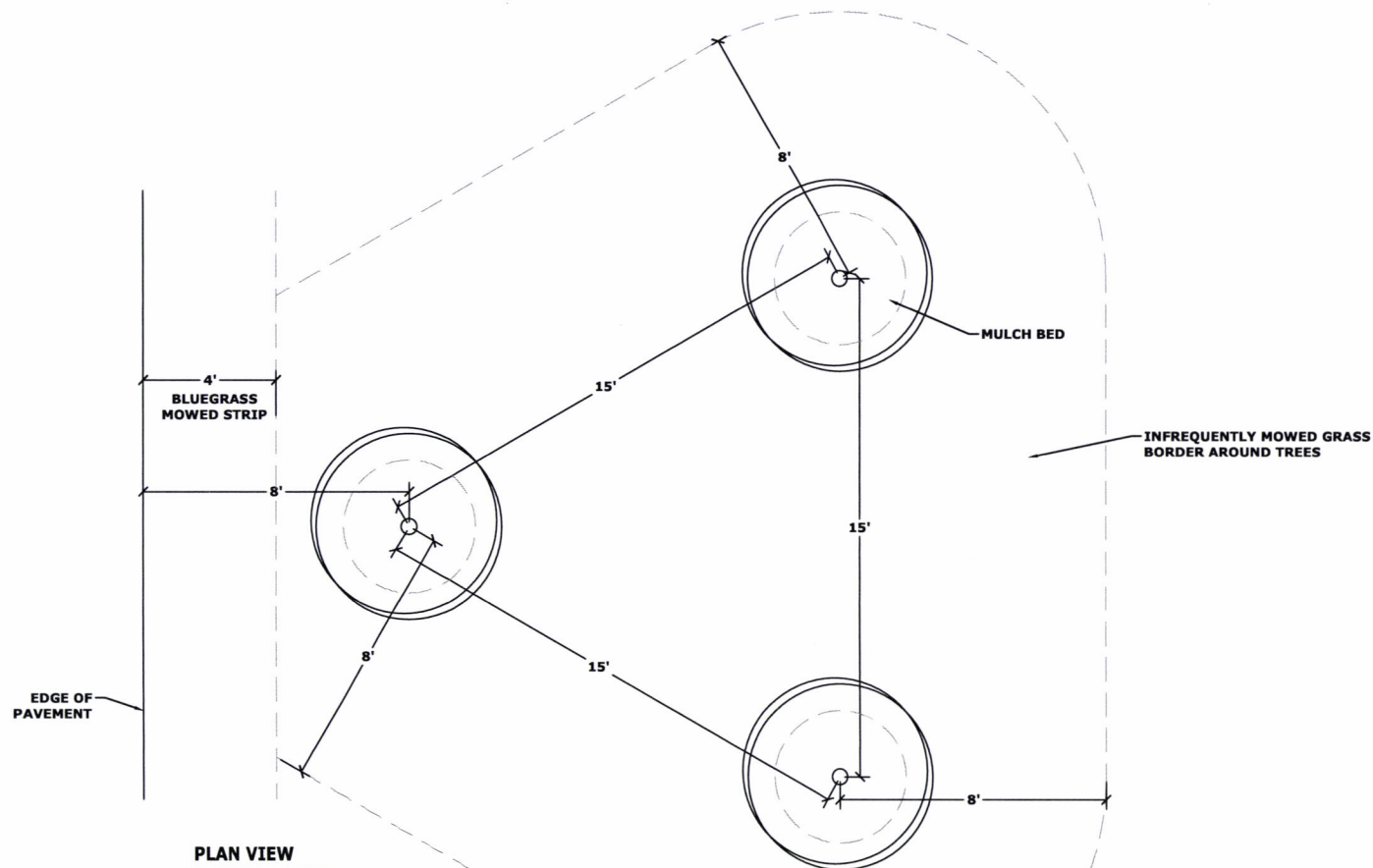
ENTRY SIDEWALK MEDIAN DETAIL

NOT TO SCALE

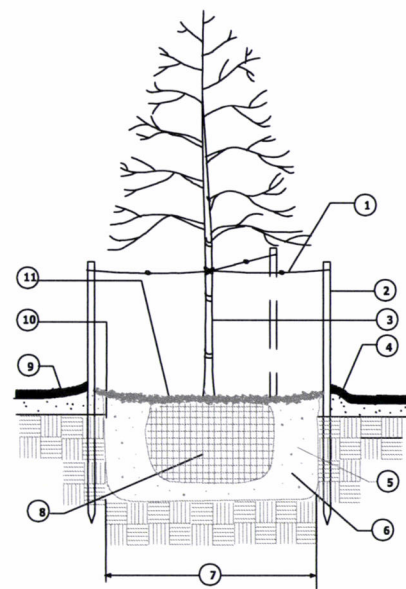


PAVEMENT THICKNESS DETAIL

NOT TO SCALE



PLAN VIEW

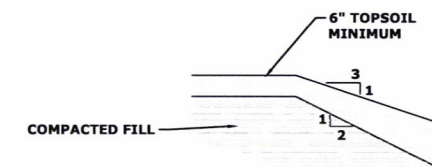


TYPICAL TREE PLANTING DETAIL

NOT TO SCALE

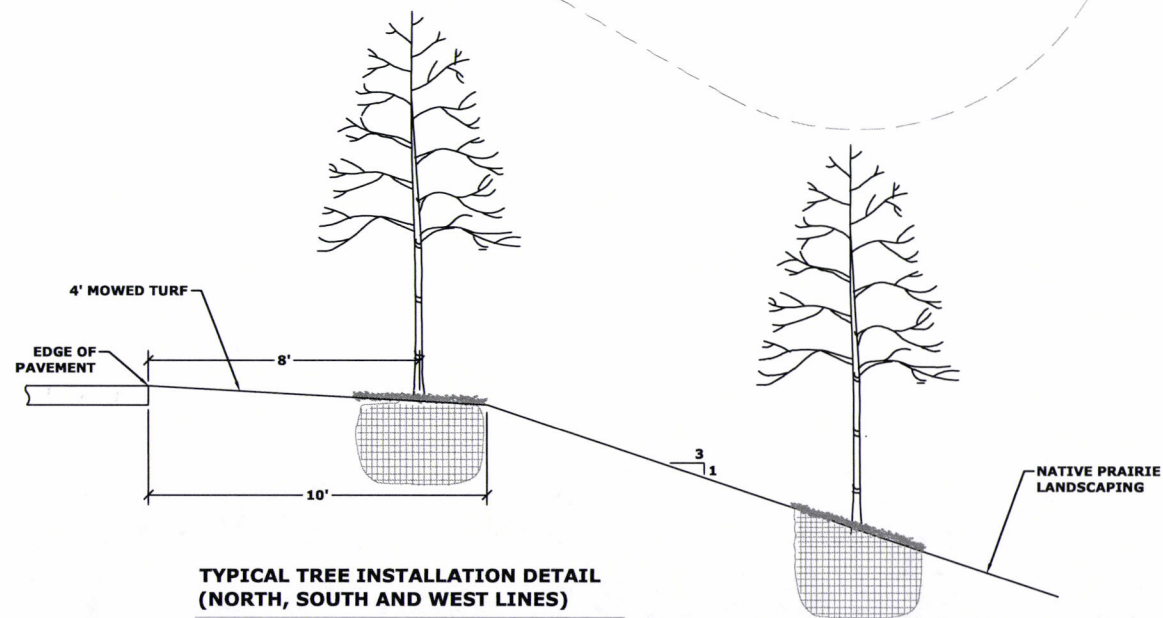
- 1 TREE TIE - FASTEN TO TREE TRUNK W/ RUBBER HOSE ABOUT SCAFFOLD BRANCHES
- 2 WOOD STAKE OR WOOD DEADMEN (8-10" EXPOSED) STAKE ON THREE SIDES SPACED 120 DEGREES APART
- 3 TREE TRUNK W/ WRAP
- 4 5" WATERING BASIN
- 5 FERTILIZER TABLETS (3" DEEP)
- 6 PLANTING BACKFILL
- 7 THREE TIMES ROOTBALL DIAMETER (MINIMUM)
- 8 ROOTBALL
- 9 FINISH GRADE
- 10 PLANT PIT W/ ROUGHENED SIDES
- 11 3-4" SHREDDED BARK/HARDWOOD MULCH

- NOTES:
1. THE PLANTING HOLE SHOULD BE SHALLOW AND WIDE TO ALLOW FOR RAPID GROWTH AFTER PLANTING.
 2. DO NOT THIN CROWN. PRUNE DAMAGED OR BROKEN BRANCHES AS NEEDED.
 3. SET TREE 2-3 INCHES ABOVE FINISHED GRADE.
 4. APPLY WATER TO HOLE WHILE BACKFILLING TO ASSURE AIR POCKETS DO NOT FORM.



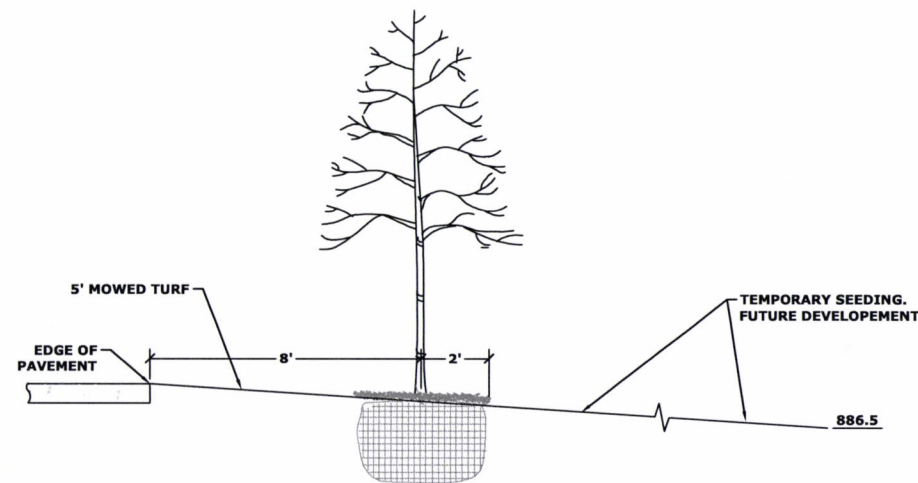
TOPSOIL PLACEMENT DETAIL

NOT TO SCALE



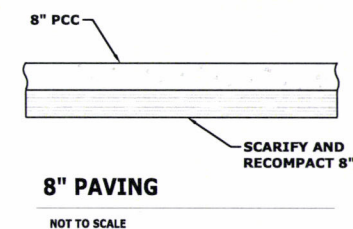
TYPICAL TREE INSTALLATION DETAIL (NORTH, SOUTH AND WEST LINES)

NOT TO SCALE



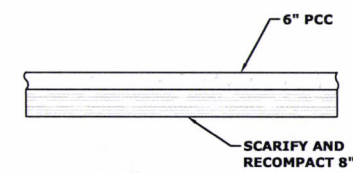
TYPICAL TREE INSTALLATION DETAIL (EAST LINE)

NOT TO SCALE



8" PAVING

NOT TO SCALE



6" PAVING

NOT TO SCALE

DRAWING FILENAME: K:\proj\5000\5174-12a_civ_develop\Drawings\Civil\5174-12A_Details.dwg
 PLOT STYLE TABLE: Fox@rvScale.ctb
 LAYER MGR NAME: C6.0

DATE	BY	DESIGNED	CHECKED	LAST UPDATE
08/12	SJR	SJR	SJR	08/14/12
08/12	SRS	SRS	SRS	

REVISION	DATE

FOX Engineering Associates, Inc.
 414 South 17th Street, Suite 107
 Ames, Iowa 50010
 Phone: (515) 233-0000
 FAX: (515) 233-0103



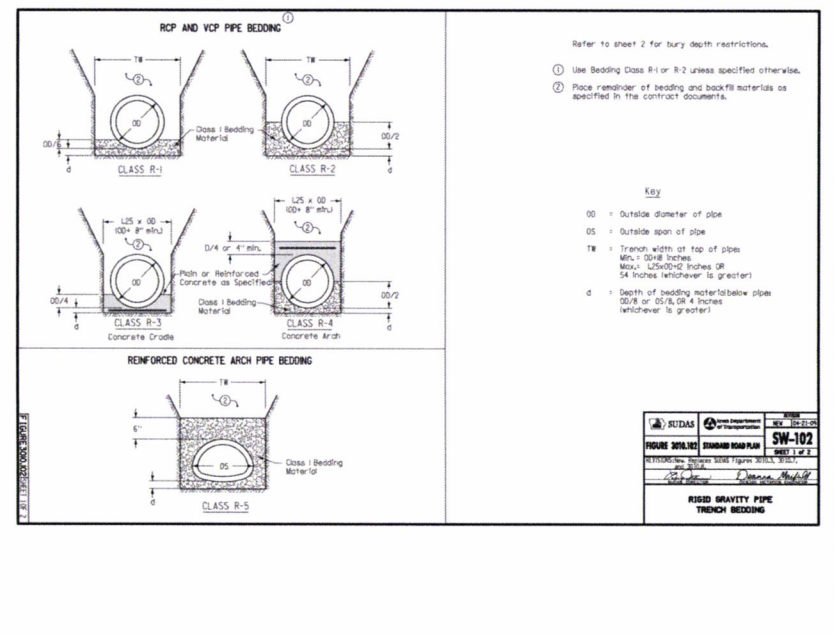
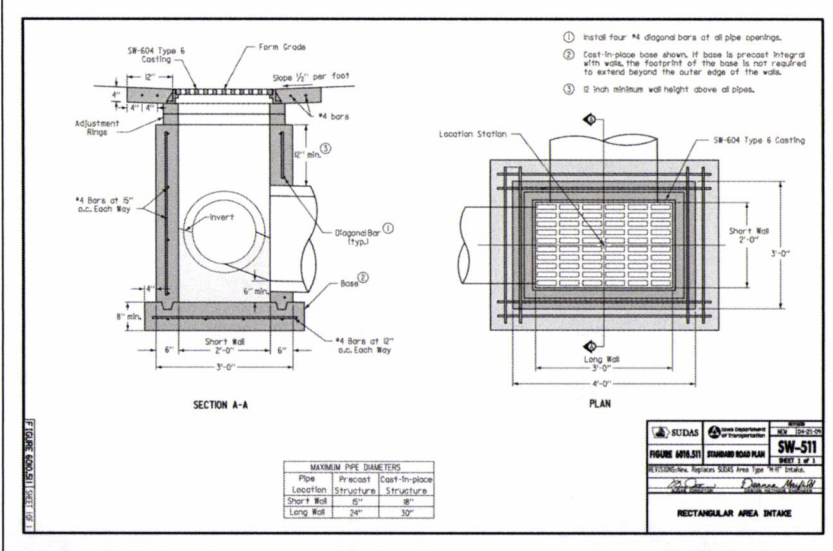
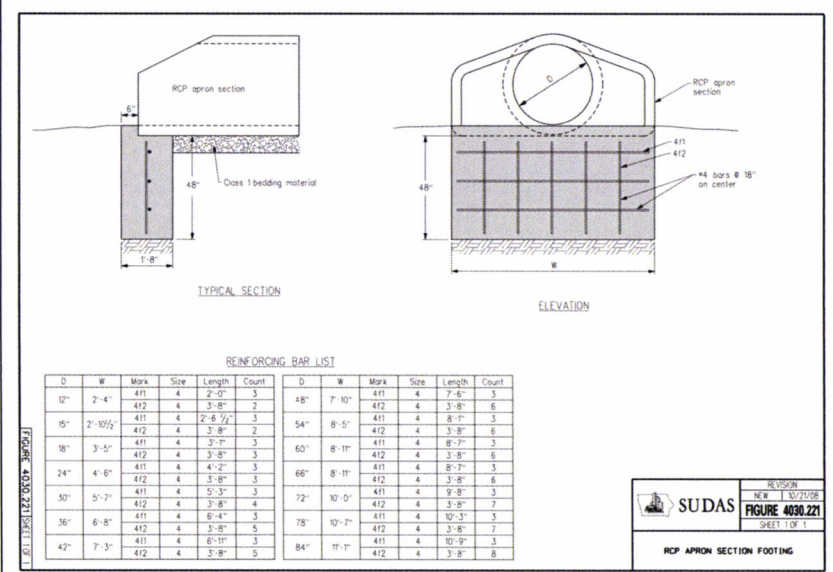
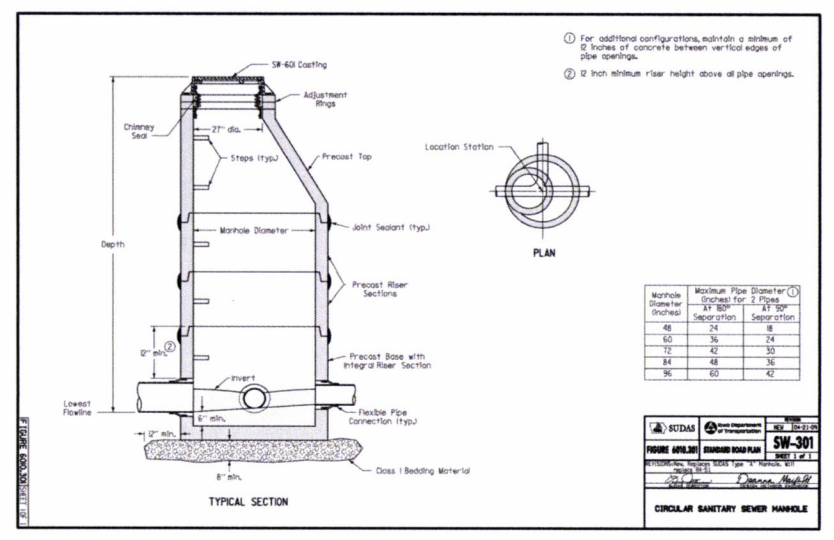
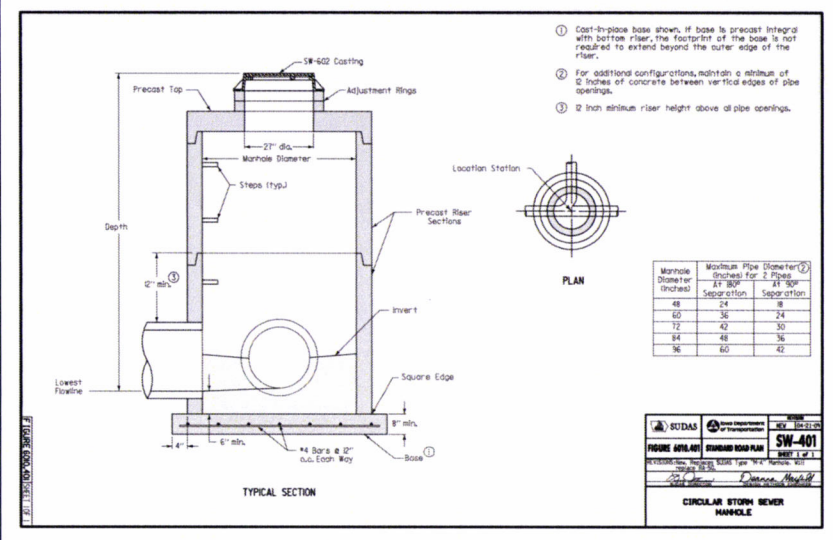
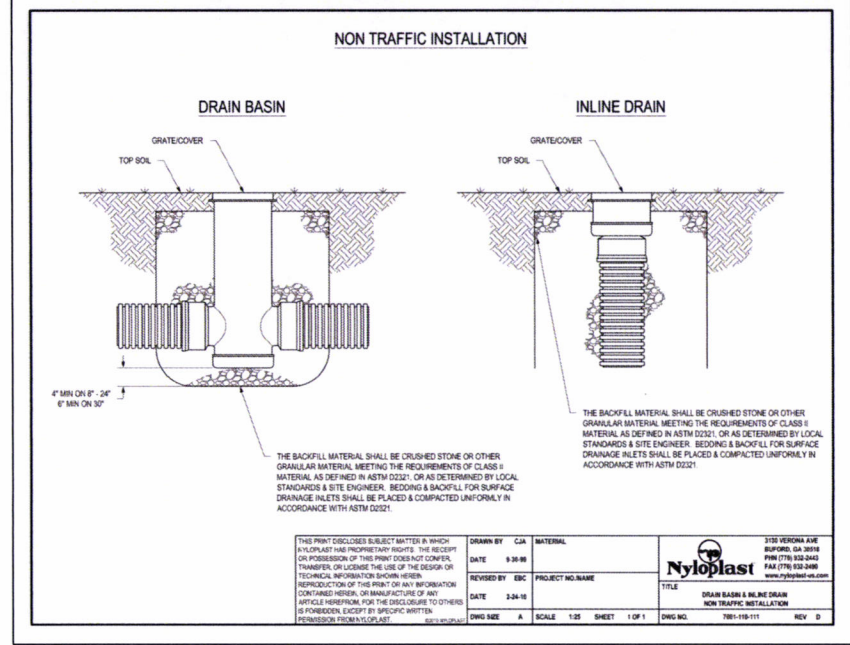
DETAILS
 DEERY BROTHERS' MOTORS SITE PLAN
 DEERY BROTHERS' SUBDIVISION
 SOUTH 16TH AND DAYTON
 AMES, IOWA

PROJECT NO. 5174-12A

SHEET

C6.0

DRAWING FILENAME: K:\1\proj\5000\174-12a_cw_dealers\DWG\174-12a_details.dwg
 PLOT STYLE TABLE: FoxGPVScale.ctb
 LAYER MNGR NAME: C6.1



CLASS III RCP						CLASS IV RCP						CLASS V RCP					
Pipe Diameter (Inches)	Class R-1 Bedding	Class R-2 Bedding	Class R-3 & R-4 Bedding	Class R-3 & R-4 Bedding	Class R-3 & R-4 Bedding	Pipe Diameter (Inches)	Class R-1 Bedding	Class R-2 Bedding	Class R-3 & R-4 Bedding	Class R-3 & R-4 Bedding	Class R-3 & R-4 Bedding	Pipe Diameter (Inches)	Class R-1 Bedding	Class R-2 Bedding	Class R-3 & R-4 Bedding		
12	8"	12"	12"	12"	12"	12	8"	12"	12"	12"	12"	12	8"	12"	12"		
15	8"	12"	12"	12"	12"	15	8"	12"	12"	12"	12"	15	8"	12"	12"		
18	8"	12"	12"	12"	12"	18	8"	12"	12"	12"	12"	18	8"	12"	12"		
24	8"	12"	12"	12"	12"	24	8"	12"	12"	12"	12"	24	8"	12"	12"		
30	8"	12"	12"	12"	12"	30	8"	12"	12"	12"	12"	30	8"	12"	12"		
36	8"	12"	12"	12"	12"	36	8"	12"	12"	12"	12"	36	8"	12"	12"		
42	8"	12"	12"	12"	12"	42	8"	12"	12"	12"	12"	42	8"	12"	12"		
48	8"	12"	12"	12"	12"	48	8"	12"	12"	12"	12"	48	8"	12"	12"		
54	8"	12"	12"	12"	12"	54	8"	12"	12"	12"	12"	54	8"	12"	12"		
60	8"	12"	12"	12"	12"	60	8"	12"	12"	12"	12"	60	8"	12"	12"		
66	8"	12"	12"	12"	12"	66	8"	12"	12"	12"	12"	66	8"	12"	12"		
72	8"	12"	12"	12"	12"	72	8"	12"	12"	12"	12"	72	8"	12"	12"		

FIGURE SW-102
 REVISIONS: 0
 DATE: 9/30/06
 PROJECT NO. NAME: DRAIN BASIN & INLINE DRAIN
 DATE: 2/24/16
 DWG. NO. A SCALE: 1/2" = 1'-0" SHEET: 1 OF 1
 PWS NO.: 789-109-011 REV: 0

SUDAS

FIGURE SW-102
 REVISIONS: 0
 DATE: 9/30/06
 PROJECT NO. NAME: DRAIN BASIN & INLINE DRAIN
 DATE: 2/24/16
 DWG. NO. A SCALE: 1/2" = 1'-0" SHEET: 1 OF 1
 PWS NO.: 789-109-011 REV: 0

RIGID GRAVITY PIPE TRENCH BEDDING