SITE PLAN FOR:

WINDSOR VILLAGE PLAT 5

ANKENY, IOWA

VICINITY MAP

NOT TO SCALE

OWNER / APPLICANT

DRA PROPERTIES LC
CONTACT: TED RAPP
1325 NE 36TH STREET
ANKENY, IA 50021
PH. (515) 964-9444

ENGINEER

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

SURVEYOR

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

SUBMITTAL DATES

-SITE PLAN SUBMITTAL TO CITY #1:	8/01/16
-SITE PLAN SUBMITTAL TO CITY #2:	8/22/16
-SITE PLAN SUBMITTAL TO CITY #3:	9/09/16
-SITE PLAN SUBMITTAL TO CITY #4:	9/22/16

LEGAL DESCRIPTION

WARRANTY DEED (BOOK 15744, PAGE 892)
NORTH 300.0 FEET OF THE WEST 300.0 FEET OF THE NORTHWEST FRACTIONAL QUARTER (NW FR. 1/4) OF THE NORTHWEST FRACTIONAL QUARTER (NW FR. 1/4) OF SECTION 18, TOWNSHIP 80, RANGE 23, WEST OF THE 5TH P.M., POLK COUNTY, IOWA, EXCEPT THE WEST 33.0 FEET THEREOF, AND EXCEPT RIGHT OF WAY OF N.E 102ND AVENUE, POLK COUNTY, IOWA.

AND

OUTLOT 'A', WINDSOR VILLAGE PLAT 4, AN OFFICIAL PLAT IN THE CITY OF ANKENY, POLK COUNTY IOWA.

PROPERTY CONTAINS 3.19 ACRES (138,894 SQUARE FEET).

PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

PROJECT SITE ADDRESS

NE WINDSOR DRIVE AND NE 18TH STREET

ZONING

R-3A (PLANNED MULTIPLE-FAMILY RESIDENCE)

BULK REGULATIONS

MIN. YARDS	= AS ILLUSTRATED
MAXIMUM HEIGHT	= 45 FEET
MIN. LOT AREA	= NONE
BUILDING SEPARATION	= 12' PRINCIPAL STRUCTURES, 10' GARAGES
SIGNAGE	= ONE MONUMENT SIGN

R-3 ZONING REGULATIONS SHALL APPLY TO ANY ITEMS NOT COVERED.

DEVELOPMENT SUMMARY

AREA: 3.15 ACRES (137,216 SF), 3.00 NET (LESS ROW)

ZONING: R-3A (PLANNED MULTIPLE-FAMILY RESIDENCE)

OPEN SPACE CALCULATION:

TOTAL SITE:		= 130,598 SF (3.00 NET ACRES)
OPEN SPACE REQUIRED (20%)		= 26,120 SF
OPEN SPACE PROVIDED		= 32,453 SF (25%)
BUILDING	=	75,600 SF
STREET/PARKING	=	12,950 SF
DRIVES	=	6,050 SF
SIDEWALK	=	3,545 SF
	=	98,145 SF

PARKING:

18 TOWNHOME UNITS
1 PER EVERY 4 UNITS (IN ADDITION TO TWO CAR GARAGES)

REQUIRED	=	5 STALLS
PROVIDED	=	5 STALLS

ERU CALCULATION

IMPERVIOUS SURFACES:

BUILDING (4,200 SF)	= 75,600 SF
PRIVATE STREET/PARKING	= 12,950 SF
DRIVES	= 6,050 SF
SIDEWALK	= 3,545 SF
TOTAL IMPERVIOUS AREA	= 98,145 SF
ERU (1/UNIT)	= 18

INDEX OF SHEETS

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

DATE OF SURVEY

SEPTEMBER 25, 2015 &
MARCH 16, 2016

BENCHMARKS

ARROW ON HYDRANT ON NE 16TH STREET AT DEAD END.
ELEVATION=924.61

ARROW ON HYDRANT ON NE FORD LANE AT DEAD END.
ELEVATION=919.04

BURY BOLT ON HYDRANT EAST OF NE DELAWARE AVENUE AND 41 FEET +/- SOUTH OF NE 18TH STREET.
ELEVATION=933.41

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
know what's below. Call before you dig.

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.

GENERAL LEGEND

PROPOSED

PROJECT BOUNDARY
LOT LINE
SECTION LINE
CENTER LINE
RIGHT OF WAY — R/W —
PERMANENT EASEMENT — P/E —
TEMPORARY EASEMENT — T/E —
TYPE SW-501 STORM INTAKE
TYPE SW-503 STORM INTAKE
TYPE SW-505 STORM INTAKE
TYPE SW-506 STORM INTAKE
TYPE SW-513 STORM INTAKE
TYPE SW-401 STORM MANHOLE
TYPE SW-402 STORM MANHOLE
TYPE SW-301 SANITARY MANHOLE
STORM/SANITARY CLEANOUT
WATER VALVE
FIRE HYDRANT ASSEMBLY
SIGN
DETECTABLE WARNING PANEL
STORM SEWER STRUCTURE NO. — ST-10
STORM SEWER PIPE NO. — L-10
SANITARY SEWER STRUCTURE NO. — S-10
SANITARY SEWER PIPE NO. — P-10
SANITARY SEWER WITH SIZE — 8"S —
SANITARY SERVICE — S — S — S —
STORM SEWER
STORM SERVICE — ST — ST —
WATERMAIN WITH SIZE — 8"W —
WATER SERVICE — W — W —
SAWCUT (FULL DEPTH)
SILT FENCE
GARAGE FLOOR ELEVATION (AT OVERHEAD DOOR) — G.F.E.
USE AS CONSTRUCTED — (U.A.C.)

EXISTING

SANITARY MANHOLE
WATER VALVE BOX
FIRE HYDRANT
WATER CURB STOP
WELL
STORM SEWER MANHOLE
STORM SEWER SINGLE INTAKE
STORM SEWER DOUBLE INTAKE
FLARED END SECTION
ROOF DRAIN/ DOWNSPOUT
DECIDUOUS TREE
CONIFEROUS TREE
DECIDUOUS SHRUB
CONIFEROUS SHRUB
ELECTRIC POWER POLE
GUY ANCHOR
STREET LIGHT
POWER POLE W/ TRANSFORMER
UTILITY POLE W/ LIGHT
ELECTRIC BOX
ELECTRIC TRANSFORMER
ELECTRIC MANHOLE OR VAULT
TRAFFIC SIGN
TELEPHONE JUNCTION BOX
TELEPHONE MANHOLE/VAULT
TELEPHONE POLE
GAS VALVE BOX
CABLE TV JUNCTION BOX
CABLE TV MANHOLE/VAULT
MAIL BOX
BENCHMARK
SOIL BORING
UNDERGROUND TV CABLE — TV —
GAS MAIN — G —
FIBER OPTIC — FO —
UNDERGROUND TELEPHONE — T —
OVERHEAD ELECTRIC — OE —
UNDERGROUND ELECTRIC — E —
FIELD TILE — TILE —
SANITARY SEWER W/ SIZE — 8"S —
STORM SEWER W/ SIZE — 15" RCP —
WATER MAIN W/ SIZE — 8"W —

RECEIVED
SEP 23 2016
CITY OF ANKENY

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 CONTRACTORS 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 2016 EDITION OF THE SUDAS 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.

THIS DESIGN SPECIFICALLY PREPARED FOR USE AT THE LOCATION SHOWN. USE IN ANY OTHER MANNER EXCEEDS THE INTENDED PURPOSE OF THESE DRAWINGS AND ANY ACCOMPANYING SPECIFICATIONS.

ROLL CALL
Plan & Zoning Commission
Ankeny, IA

Date 9-26-16

Anderson	Aye	Nay	Pass	Absent
Flack	Aye	Nay	Pass	Absent
Hunter	Aye	Nay	Pass	Absent
Mollenhauer	Aye	Nay	Pass	Absent
Odson	Aye	Nay	Pass	Absent
Ripper	Aye	Nay	Pass	Absent
Sherman	Aye	Nay	Pass	Absent
West	Aye	Nay	Pass	Absent
Whiting	Aye	Nay	Pass	Absent

Ayes 7 Nays 0 Pass 0 Absent 2

APPROVED
T. Flack Chairperson
B. Lugsang Secretary

CIVIL DESIGN ADVANTAGE
3405 SE CROSSROADS DR. SUITE G, GRIMES, IOWA 50111
PH: (515) 369-4400 Fax: (515) 369-4410
PROJECT NO. 1602.042

WINDSOR VILLAGE PLAT 5

FILE: H:\2016\1602042\DWG\1602042-SITE.DWG
LAYOUT: 1 PLAT 5 DATE PLOTTED: 9/22/2016 3:23 PM
PLOTTED BY: BRAD KUEHL COMMENT:
DRAWN BY:

GENERAL NOTES

1. 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 CONTRACTORS 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 800-292-8989 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.

2. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL NOTIFY (48 HRS NOTICE) THE FOLLOWING:
   A. CITY OF ANKENY
   B. APPROPRIATE UTILITY COMPANIES
   C. OWNER
   D. CIVIL DESIGN ADVANTAGE

3. 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.

4. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN ALL SUPPLIERS AND SUBCONTRACTORS INVOLVED IN THE PROJECT. INCLUDING STAGING OF CONSTRUCTION DETAILS.

5. THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.

6. THE CONTRACTOR MAY BE REQUIRED AS DIRECTED BY THE ENGINEER OR THE CITY, TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY.

7. SPECIAL CARE SHALL BE TAKEN WHEN FORMING AT INTERSECTIONS SO THE PROFILES SHOWN ON THE PLANS AND THE ELEVATIONS SHOWN ON THE INTERSECTION DETAILS ARE OBTAINED. SHORT LENGTHS OF FORMS OR FLEXIBLE FORMS MAY BE NECESSARY AT THESE LOCATIONS.

8. TO OBTAIN THE CORRECT FORM GRADES AT LOW POINTS WHERE INTAKES ARE LOCATED, THE CONTRACTOR MUST EXERCISE ADDITIONAL CARE WHEN PAVING FULL WIDTH PAVEMENTS. THIS MAY REQUIRE POURING ONE HALF OF THE PAVEMENT AT A TIME OR OTHER METHODS APPROVED BY THE ENGINEER.

9. THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN THE PROPOSED AND EXISTING RIGHT OF WAY, CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS.

10. PLAN AND PROFILE SHEETS INCLUDED IN THE PROJECT ARE FOR THE PURPOSE OF ALIGNMENT, LOCATION AND SPECIFIC DIRECTIONS FOR WORK TO BE PERFORMED UNDER THIS CONTRACT. IRRELEVANT DATA ON THESE SHEETS IS NOT TO BE CONSIDERED A PART OF THIS CONTRACT.

11. THE CONTRACTOR IS REQUIRED TO BE FAMILIAR WITH AND COMPLY WITH OSHA STANDARDS. NOTHING WITHIN THESE PLANS SHALL RELIEVE THE CONTRACTOR OF THIS REQUIREMENT.

12. CIVIL DESIGN ADVANTAGE WILL PROVIDE ALL CONSTRUCTION STAKING ON THIS PROJECT. NOTIFY MIKE BROONER (369-4400) A MINIMUM OF 48 HOURS BEFORE CONSTRUCTION STAKES ARE REQUIRED.

13. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES REQUIRED ON THE STORM WATER POLLUTION PREVENTION PLAN.

14. IN THE EVENT OF A DISCREPANCY BETWEEN DETAILED PLANS AND QUANTITIES, THE DETAILED PLANS SHALL GOVERN.

15. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL. ALL TRAFFIC CONTROL SHALL COMPLY WITH MUTCD AND SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

16. ALL SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.

17. DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE RIGHT OF WAY.

18. ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.

19. ALL FIELD TILES ENCOUNTERED SHALL BE REPAIRED AND CONNECTED TO STORM SEWERS WHERE POSSIBLE. LOCATIONS SHALL BE PROVIDED TO ENGINEER FOR NOTATION ON AS-BUILTS INCLUDING LOCATION, TYPE OF TILE, & TILE ELEVATION.

20. PRIOR TO ANY WORK AT THIS SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER OR ENGINEER, AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.

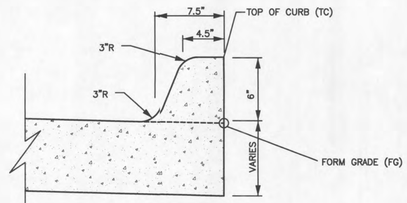
21. CONTRACTOR SHALL COMPLY WITH ALL PROWAG A.D.A. REQUIREMENTS FOR ACCESSIBLE SIDEWALK RAMPS INCLUDING RAISED TRUNCATED DOME DETECTABLE WARNINGS.

22. CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND 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. PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE OWNER.

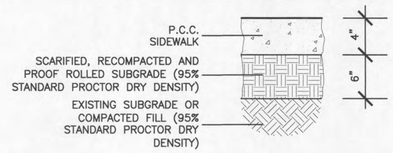
23. ALL MATERIAL TESTING SHALL BE CONSIDERED INCIDENTAL TO OTHER CONSTRUCTION.

24. THREE PIECE CASTINGS FOR MANHOLES ARE NOT ALLOWED.

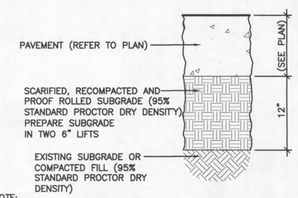
25. THE GRADING OF THE DETENTION FACILITY AND INSTALLATION OF THE STORM SEWER SYSTEM SHALL BE COMPLETED AND FUNCTIONAL PRIOR TO ANY INCREASE IN THE SIZE OF IMPERVIOUS SURFACES WITHIN THE SITE OR THE PREVIOUSLY MENTIONED ITEMS SHALL BE GRADED/INSTALLED AS SOON AS PRACTICAL.



6" PCC INTEGRAL CURB

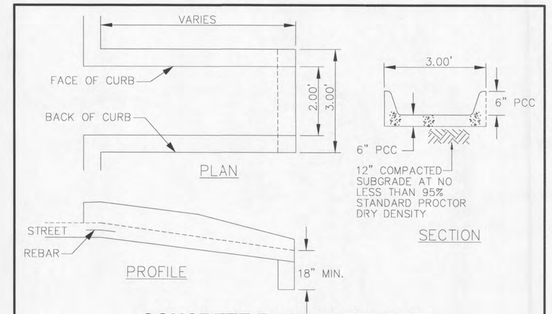


PCC SIDEWALK DETAIL



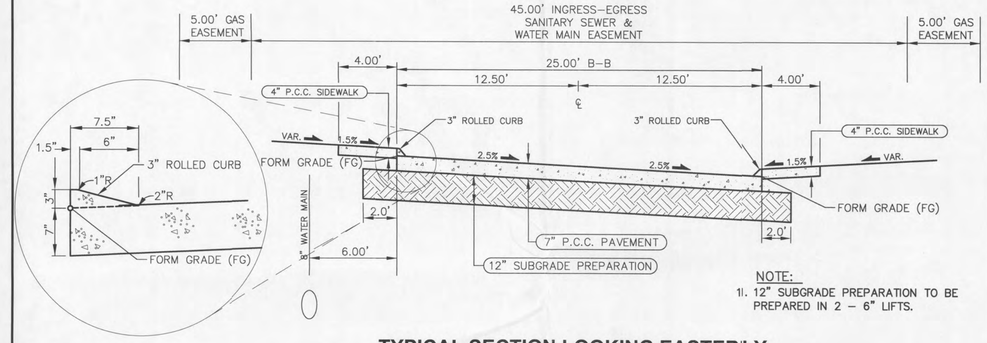
NOTE:
1. SUBGRADE PREPARATION SHALL EXTEND 24" BEYOND EDGE OF PAVING OR BACK OF CURB. EXCEPT WHEN ABUTTING EXISTING PAVEMENT.

12" SUBGRADE PREPARATION DETAIL



CONCRETE FLUME LETDOWN

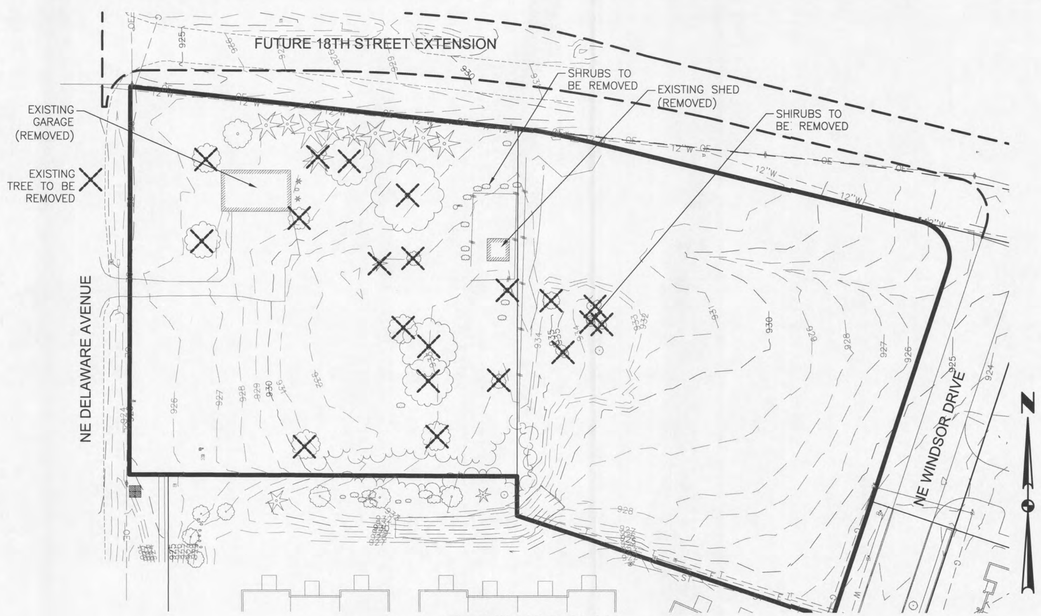
NOT TO SCALE



NOTE:
1. 12" SUBGRADE PREPARATION TO BE PREPARED IN 2 - 6" LIFTS.

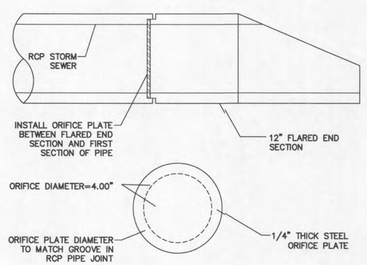
TYPICAL SECTION LOOKING EASTERLY

NOT TO SCALE



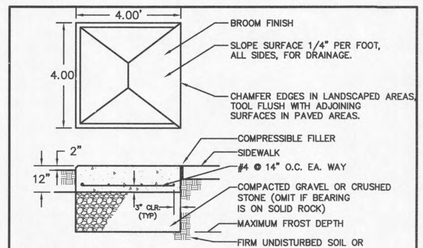
REMOVALS PLAN

NOT TO SCALE



ORIFICE PLATE DETAIL

NOT TO SCALE



GENERAL NOTES
1. CONCRETE: 3000 PSI @ 28 DAYS, 6% AIR ENTRAINMENT, 3" SLUMP, PLACE IN ACCORDANCE WITH ACI-301.
2. REINFORCING STEEL: ASTM A615, GRADE 60.
3. THIS BASE DETAIL CAN BE USED FOR NEIGHBORHOOD DELIVERY AND COLLECTION BOX UNITS (NDCBU) CLUSTER BOXES AND PARCEL LOCKERS WITH 4"X10" BOLT PATTERN.
4. REQUIRED EXPANSION BOLT CAPACITY, BASED ON CALCULATED DESIGN LOAD= 3100 LBS TENSION, 2000 LBS SHEAR.
5. MAILBOX PADS TO BE INSTALLED AT TIME OF SIDEWALK INSTALLATION.

CLUSTER MAILBOX PAD DETAIL

REVISIONS	DATE
SUBMITTAL #4 TO CITY	9/22/16
SUBMITTAL #3 TO CITY	9/09/16
SUBMITTAL #2 TO CITY	8/22/16
SUBMITTAL #1 TO CITY	8/01/16

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

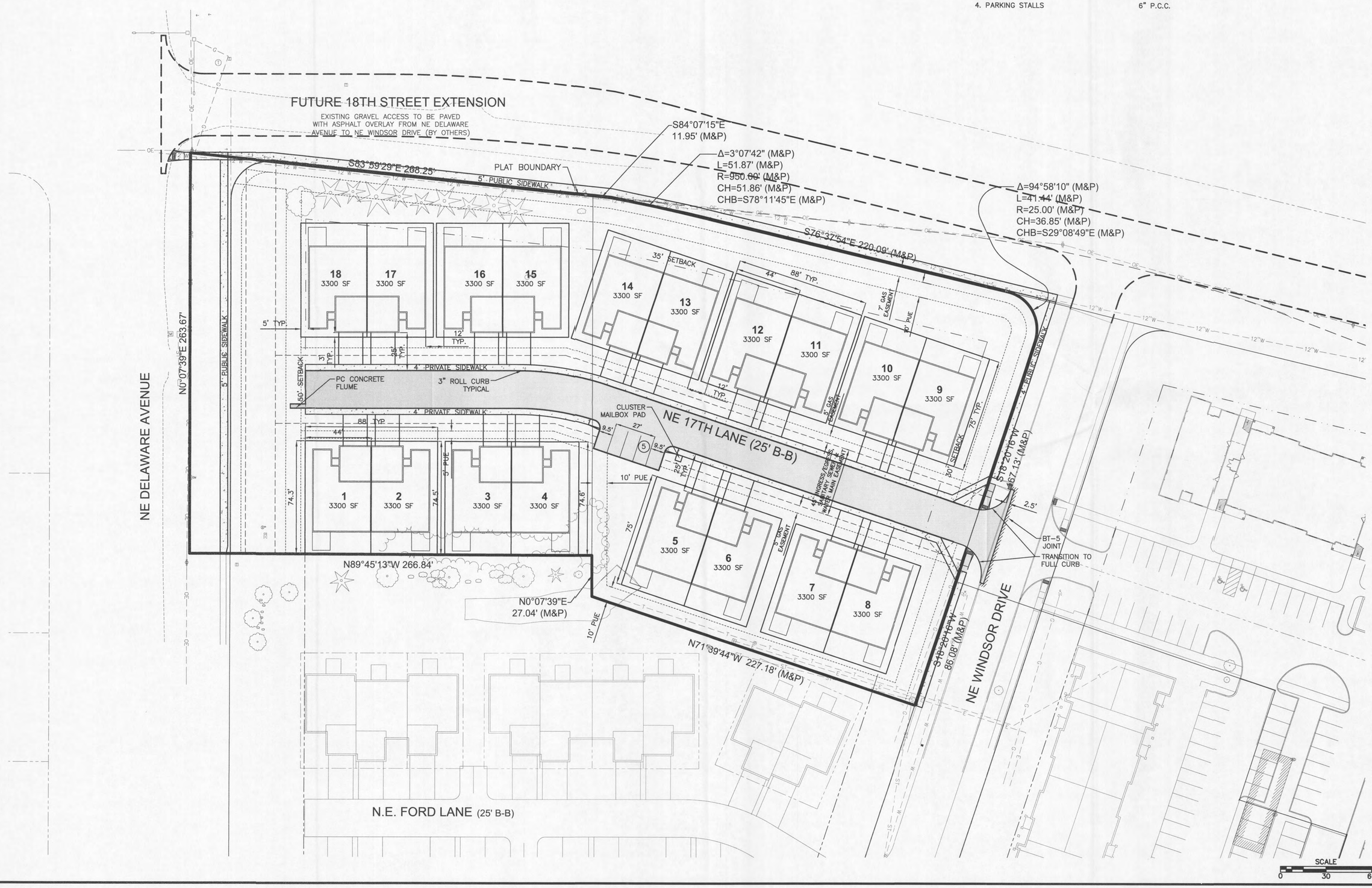
WINDSOR VILLAGE PLAT 5
NOTES AND DETAILS

PAVEMENT THICKNESS

1. SIDEWALKS	4" P.C.C.
2. SIDEWALK RAMPS	6" P.C.C.
3. DRIVE AISLES	7" P.C.C.
4. PARKING STALLS	6" P.C.C.

GENERAL NOTES

REFER TO SHEET 2



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

WINDSOR VILLAGE PLAT 5
DIMENSION PLAN

ANKENY, IOWA

GENERAL NOTES

REFER TO SHEET 2

GRADING NOTES

1. PRIOR TO ANY GRADING, A COPY OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT SHALL BE PROVIDED TO THE CITY OF ANKENY 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 STATEWIDE URBAN DESIGN AND SPECIFICATION (SUDAS) MANUAL AND ALL CITY SUPPLEMENTALS, IF APPLICABLE.
4. MATCH EXISTING GRADES AT PROPERTY LINES AND/OR CONSTRUCTION LIMITS.
5. ALL SPOT ELEVATIONS ARE TOP OF CURB (TC), FORM GRADE (FG), OR TOP OF FINISHED SURFACES (E.G. PAVEMENT, GROUND) 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 THEIR 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 4.9% MAXIMUM LONGITUDINAL SLOPES ON ALL PAVED WALKWAYS. ALL WALKS TO HAVE 1.9% MAXIMUM TRANSVERSE SLOPE IN THE DIRECTION OF NATURAL DRAINAGE. SAWCUT JOINTS AS SOON AS CONCRETE HAS SET. SAWCUTS TO BE 1/8" TO 1/4" WIDE; DEPTH: LONGITUDINAL T/3, TRANSVERSE T/4.
13. THE GRADING OR REGRADING OF THE DETENTION FACILITY, INSTALLATION OF THE STORM SEWER SYSTEM, AND THE INSTALLATION OF THE ORIFICE 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.
14. CONTRACTOR SHALL EXERCISE CAUTION WHEN COMPACTING SUBGRADE OVER ALL STORM SEWER PIPES. STORM SEWER PIPE IS VERY SHALLOW AND MAY INTERFERE WITH SUBGRADE PREPARATION.
15. G.F.E.=GARAGE FLOOR ELEVATION AT OVERHEAD DOOR

RECEIVED
SEP 27 2016
CITY OF ANKENY

REVISIONS	DATE
SUBMITTAL #4 TO CITY	9/22/16
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ENGINEER:
TECH:
CIVIL DESIGN ADVANTAGE

WINDSOR VILLAGE PLAT 5
GRADING PLAN

ANKENY, IOWA

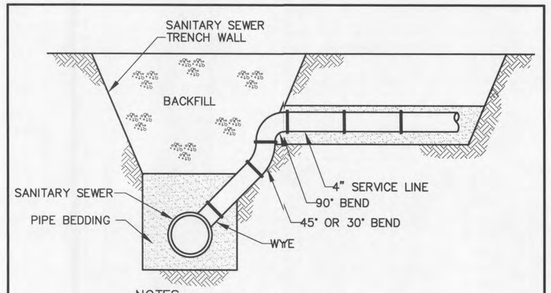
1602042

GENERAL NOTES

REFER TO SHEET 2

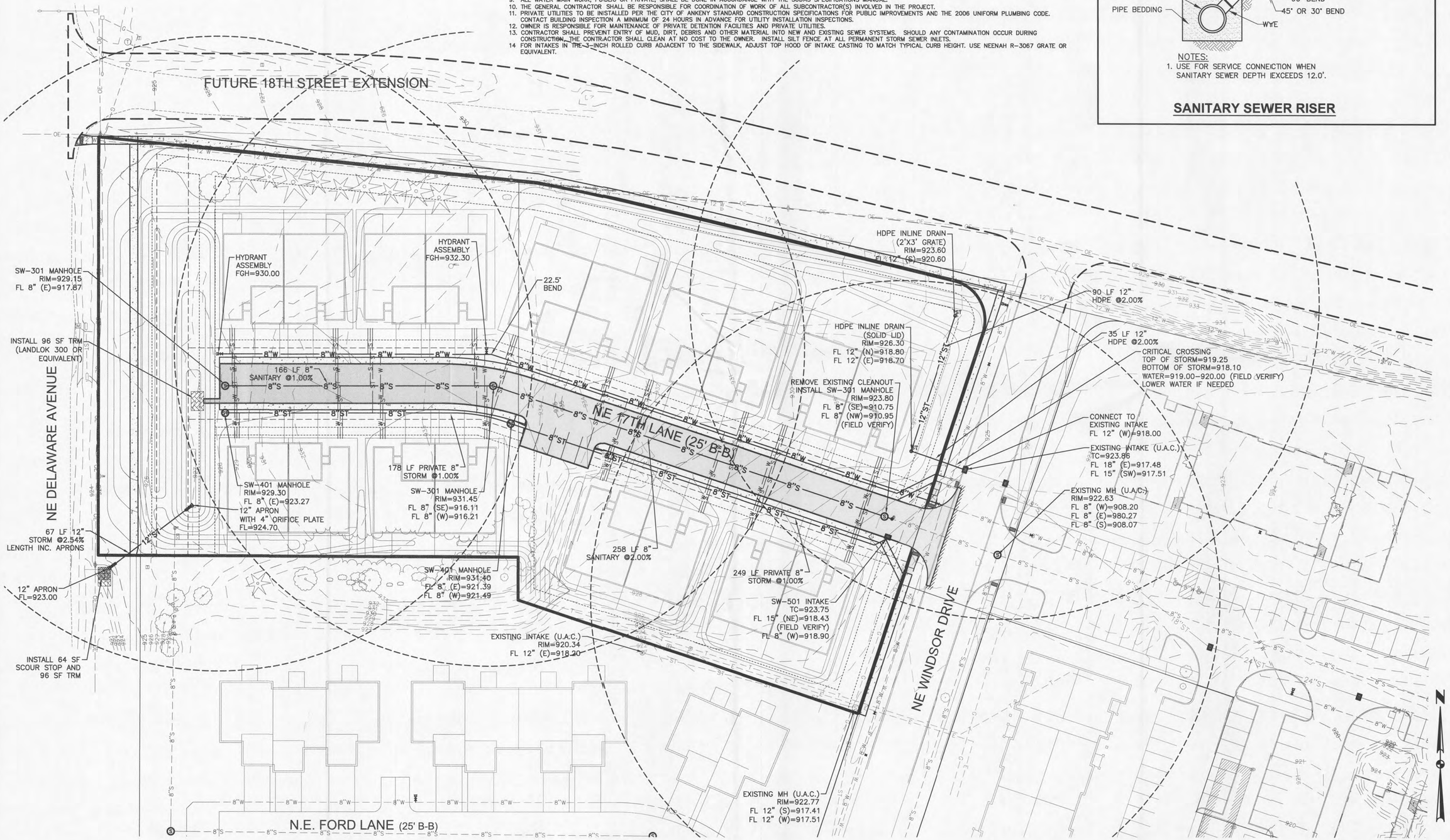
UTILITY NOTES

1. 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. REIFER TO MECHANICAL PLANS FOR GAS SERVICE CONSTRUCTION DETAILS.
2. FIELD VERIFY ELEVATIONS AND LOCATIONS OF ALL CONNECTIONS TO EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
3. PROVIDE TEMPORARY SUPPORT FOR EXISTING UTILITY LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETE.
4. BACKFILL ALL UTILITY TRENICHES ACCORDING TO THE MOST RECENT EDITION OF THE SUDAS MANUAL AND ALL CITY SUPPLEMENTALS. MAINTAIN A MINIMUM OF 5.5' COVER OVER ALL WATER MAINS.
5. ALL UTILITIES SHALL BE STUBBED TO 5 FEET FROM BUILDINGS. REFER TO MECHANICAL/ELECTRICAL/PLUMBING PLANS FOR DESIGN FROM 5' OUTSIDE OF BUILDING FACE.
6. ALL MANHOLES, UTILITY VALVES, AND INTAKES TO BE ADJUSTED OR REBUILT TO FINISHED GRADE AS REQUIRED.
7. ALL SANITARY SEWER AND WATER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ANKENY PLUMBING CODE.
8. 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 CONTRACTORS 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 800-292-8989 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
9. ALL WATER MAIN WORK, PUBLIC OR PRIVATE, SHALL BE DONE IN ACCORDANCE WITH THE SUDAS SPECIFICATIONS MANUAL.
10. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
11. PRIVATE UTILITIES TO BE INISTALLED PER THE CITY OF ANKENY STANDARD CONSTRUCTION SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2006 UNIFORM PLUMBING CODE. CONTACT BUILDING INSPECTION A MINIMUM OF 24 HOURS IN ADVANCE FOR UTILITY INSTALLATION INSPECTIONS.
12. OWNER IS RESPONSIBLE FOR MAINTENANCE OF PRIVATE DETENTION FACILITIES AND PRIVATE UTILITIES.
13. 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.
14. FOR INTAKES IN THE 3-INCH ROLLED CURB ADJACENT TO THE SIDEWALK, ADJUST TOP HOOD OF INTAKE CASTING TO MATCH TYPICAL CURB HEIGHT. USE NEENAH R-3067 GRATE OR EQUIVALENT.



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

SANITARY SEWER RISER



REVISIONS	DATE
SUBMITTAL #4 TO CITY	9/22/16
SUBMITTAL #3 TO CITY	9/09/16
SUBMITTAL #2 TO CITY	8/22/16
SUBMITTAL #1 TO CITY	8/01/16

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

WINDSOR VILLAGE PLAT 5
UTILITY PLAN

5/6

1602042

GENERAL NOTES

REFER TO SHEET 2

PAVEMENT SHADING REQUIREMENTS

20% OF ALL PAVEMENT MUST BE SHADED

PRIVATE ROAD	= 12,950 SF
DRIVEWAYS	= 6,050 SF
TOTAL PAVEMENT	= 19,000 SF
20% OF PAVEMENT	= 3,800 SF
3,800 SF/ 706 (30' DIA. TREE)	= 6 TREES
TREES PROVIDED	= 6 TREES

OPEN SPACE/ LANDSCAPE REQUIREMENTS

OPEN SPACE REQUIREMENTS

SITE AREA	= 130,598 SF
OPEN SPACE REQUIRED (20%)	= 26,120 SF
OPEN SPACE PROVIDED	= 32,453 SF (25%)

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

REQUIRED	
TREES	= 18 TREES
SHRUBS	= 52 SHRUBS
PROVIDED	
TREES	= 18 TREES
SHRUBS	= 54 SHRUBS

SCREENING REQUIREMENTS

DELAWARE AVE 245 LF (CLASS 'B')	TREES	SHRUBS
REQUIRED	10	25
PROVIDED	10	25

NW 18TH STREET 545 LF (CLASS 'A')	TREES	SHRUBS
REQUIRED	17	27
PROVIDED	18**	27

** 18 TREES PROVIDED INCLUDES 1 EXISTING OVERSTORY TREE AND 9 EXISTING EVERGREEN TREES

LANDSCAPE NOTES

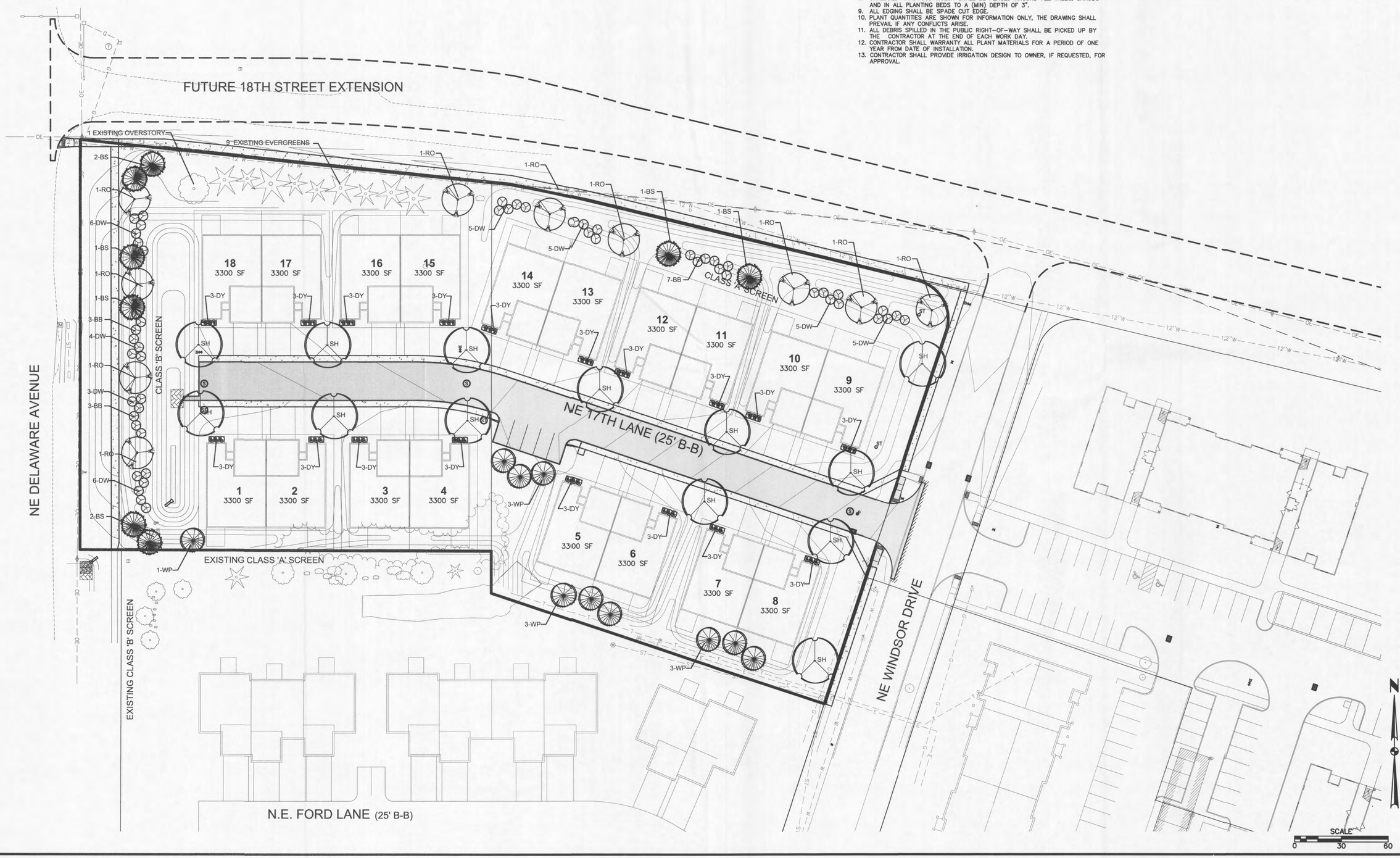
1. LOCATE ALL UTILITIES BEFORE ANY PLANTING BEGINS.
2. THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND ALL CITY SUPPLEMENTALS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.
3. TYPE, SIZE, AND QUALITY OF PLANT MATERIAL SHALL CONFORM TO THE MOST CURRENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1
4. ALL PLANT MATERIAL SHALL BE HEALTHY SPECIMENS WITHOUT DEFORMITIES, VOIDS 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 SOD ALL DISTURBED AREAS AS DIRECTED BY OWNER.
6. BACKFILL TO TOP OF CURB. (MINUS 1 1/2" FOR SOD, 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 SPILLED 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.

PLANT SCHEDULE

CODE	QTY	OVERSTORY TREES		SIZE	COND
SH	13	SHADEMASTER HONEYLOCUST	GLEDITSIA TRICANTHAS INERMIS 'SHADEMASTER'	2" CAL	B&B
RO	10	RED OAK	QUERCUS RUBRA	2" CAL	B&B

CODE	QTY	EVERGREEN TREES		SIZE	COND
WP	10	EASTERN WHITE PINE	PINUS STROBUS	6' HT.	B&B
BS	8	COLORADO BLUE SPRUCE	PICEA PUNGENS	6' HT.	B&B

CODE	QTY	SHRUBS		SIZE	COND
DW	39	IVORY HALO DOGWOOD	CORNUS ALBA 'BAILHALO'	18" HT.	CONT
BB	13	DWARF BURNING BUSH	EOUNYMOUS ALATA 'COMPACTA'	18" HT.	CONT
DY	54	DENSE YEW	TAXUS X MEDIA DENSIFORMIS	18" HT.	CONT



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