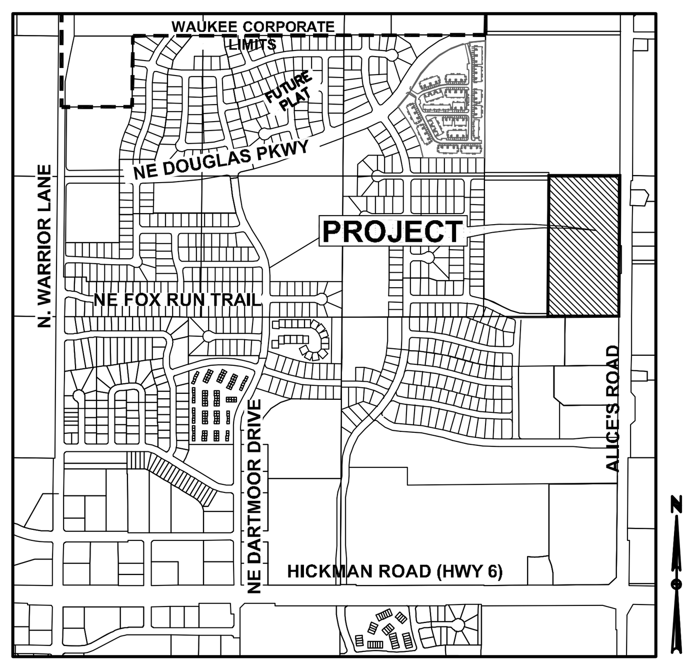
SITE PLAN FOR:

ALICE PATRICIA HOMES

WAUKEE, IOWA

VICINITY MAP

NOT TO SCALE



WAUKEE

OWNER / APPLICANT

SILVER OAK INC
CONTACT: CHIP CLASSON
10430 NEW YORK AVE SUITE C
URBANDALE, IA 50322

ENGINEER

CIVIL DESIGN ADVANTAGE, LLC
CONTACT: ERIN OLLENDIKE
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

PROJECT MANAGER / ARCHITECT / BUILDER

JERRY'S HOMES
CONTACT: CHIP CLASSON
10430 NEW YORK AVE SUITE C
URBANDALE, IA 50322
PH. (515) 727–0356

DATE OF SURVEY

FEBRUARY 3, 2015

BENCHMARKS

1. STORM SEWER MANHOLE RIM LOCATED AT THE N.E. CORNER OF WARRIOR LANE AND FOX RUN TRAIL INTERSECTION. MANHOLE IS LOCATED 4' FROM THE EAST BACK OF CURB LINE OF WARRIOR LANE AND 46' NORTH OF FOX RUN TRAIL CENTERLINE. ELEVATION = 1014.23
2. SANITARY SEWER MANHOLE RIM LOCATED ON THE WEST SIDE OF NE DARTMOOR DRIVE, 121' +/– NORTH OF THE CENTERLINE OF NE BOWMAN DRIVE. MANHOLE IS LOCATED 9' FROM THE WEST BACK OF CURB LINE OF NE DARTMOOR DRIVE. ELEVATION = 1020.12

ZONING

EXISTING: R–3 RENTAL MULTI–FAMILY RESIDENTIAL DISTRICT

PROJECT SITE ADDRESS

EXISTING/ PROPOSED USE

EXISTING: AGRICULTURAL ROW CROPS

PROPOSED: APARTMENT COMPLEX

SUBMITTAL DATES

–SITE PLAN SUBMITTAL TO CITY #1: 08/18/2015
–SITE PLAN SUBMITTAL TO CITY #2: 10/13/2015
–SITE PLAN SUBMITTAL TO CITY #3: 04/21/2016

FILE: H:\2014\1411577\DWG\1411577–SITE.DWG
FILE DATE: 4/21/16 DATE PLOTTED: 4/21/2016 9:32 AM COMMENT:
PLOTTED BY: JARED MURRAY TECH: ENG:

NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AN UPDATED SITE PLAN ILLUSTRATING ANY CHANGES MADE DURING CONSTRUCTION AND RECEIVE APPROVAL IN WRITING FROM THE CITY OF WAUKEE DEVELOPMENT SERVICES DEPARTMENT OF SAID CHANGES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHANGES MADE WITHOUT WRITTEN APPROVAL.
2. THE RESULTS OF THE GEOTECHNICAL REPORT ARE TO BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT. THE SITE PLAN IS SUBJECT TO ANY CHANGES REQUIRED BY THE REPORT.
3. A COPY OF THE GEOTECHNICAL REPORT SHOULD BE PROVIDED TO THE ARCHITECT AND STRUCTURAL ENGINEERING DESIGNING THE PROPOSED BUILDINGS TO ENSURE THAT FOOTINGS AND FOUNDATION WALLS ARE BEING DESIGNED.

CONSTRUCTION SCHEDULE

PHASE 1
- SITE GRADING AND UTILITIES – FALL 2015
- BUILDING 1
- BUILDING 2

PHASE 2
- BUILDING 3 – SUMMER 2016
- BUILDING 4

PHASE 3
- BUILDING 5 – FALL 2016
- BUILDING 6

PHASE 4
- BUILDING 7 – SPRING 2017
- BUILDING 8
- CLUBHOUSE

PHASE 5
- BUILDING 9 – FALL 2017
- BUILDING 10

PHASE 6
- BUILDING 11 – SPRING 2018
- BUILDING 12

NOTE:
THE SITE WILL BE MASSED GRADED AND ALL SITE UTILITIES INSTALLED DURING PHASE 1 CONSTRUCTION. ASSOCIATED GARAGES, PARKING, SIDEWALKS AND TRASH ENCLOSURES WILL BE INSTALLED WITH EACH BUILDING. REFER TO SHEET 4 FOR PHASING DETAILS.

DEVELOPMENT SUMMARY

SITE AREA: 950,239 SF (21.81 ACRES)

OPEN SPACE:
OPEN SPACE REQUIRED 190,048 SF (20%)
OPEN SPACE PROVIDED 467,397 SF (49.2%)

IMPERVIOUS AREA:

BUILDINGS:	
BUILDING 1:	10,396 SF
BUILDING 2:	10,396 SF
BUILDING 3:	10,396 SF
BUILDING 4:	10,396 SF
BUILDING 5:	10,396 SF
BUILDING 6:	10,396 SF
BUILDING 7:	10,396 SF
BUILDING 8:	10,396 SF
BUILDING 9:	10,396 SF
BUILDING 10:	10,396 SF
BUILDING 11:	10,396 SF
BUILDING 12:	10,396 SF
CLUBHOUSE & POOL:	5,785 SF
GARAGES:	63,340 SF
ROADWAY/PARKING AREAS:	254,120 SF
SIDEWALK:	34,845 SF
	482,842 SF (11.08 ACRES)

UNITS:
(12) 24 UNIT BUILDINGS = 288 UNITS

DENSITY:
OVERALL = 13.2 UNITS/AC

PARKING:
- REQUIRED:
  2 SPACES PER UNIT + 1 VISITOR SPACE PER 5 UNITS
  (288 UNITS) = 634 SPACES
- PROVIDED:
  GARAGES = 288 SPACES
  COMMON/OFF STREET PARKING = 457 SPACES
  TOTAL PROVIDED = 745 SPACES

ACCESSIBLE PARKING:
- REQUIRED:
  (501–1000 SPACES PROVIDED) = 2% OF TOTAL PROVIDED SPACES = 15 SPACES
- PROVIDED:
  TOTAL PROVIDED = 30 SPACES

INDEX OF SHEETS

NO.	DESCRIPTION
1	COVER SHEET
2–3	DETAILS
4	PHASING AND HYDRANT COVERAGE PLAN
5–6	DIMENSION PLAN
7–8	GRADING PLAN
9–10	UTILITY PLAN
11–12	EROSION PLAN
13	PRIVATE INTERSECTION DETAILS
14	LANDSCAPE PLAN

LEGAL DESCRIPTION

PARCEL 'AA' AS SHOW ON THE OF SURVEY RECORDED IN BOOK 2013, PAGE 5655 IN THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 79 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN, IN THE CITY OF WAUKEE, DALLAS COUNTY, IOWA THAT IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID PARCEL 'AA' AND THE EAST QUARTER CORNER OF SAID SECTION 27; THENCE SOUTH 89°36'27" WEST, 721.45 FEET TO THE SOUTH WEST CORNER OF SAID PARCEL 'AA'; THENCE NORTH 00°03'16" WEST, 1316.95 FEET TO THE NORTHWEST CORNER OF SAID PARCEL 'AA'; THENCE SOUTH 89°34'37" EAST, 721.46 FEET TO THE NORTHEAST CORNER OF SAID PARCEL 'AA'; THENCE SOUTH 00°03'16' EAST 1317.33 FEET TO THE POINT OF BEGINNING AND CONTAINING 21.81 ACRES.

BULK REGULATIONS:

'R–3' RENTAL MULTI FAMILY RESIDENTIAL DISTRICT ZONING REGULATIONS SHALL APPLY TO THIS AREA EXCEPT AS LISTED BELOW:

A. PRINCIPAL PERMITTED USES FOR THIS AREA SHALL INCLUDE APARTMENT DWELLINGS.

B. MINIMUM LOT AREA: 10,000 SQUARE FEET; 2,500 SQUARE FEET PER HOUSING UNIT.

C. MINIMUM FLOOR AREA: 750 SQUARE FEET PER UNIT, EXCEPT EFFICIENCIES AND 1 BEDROOM UNITS WHICH SHALL BE 600 SF

D. LOT WIDTH: 75 FEET

E. FRONT YARD: 30 FEET; WHEN FRONTING ON THE RIGHT–OF–WAY OF A MAJOR THOROUGHFARE SHOWN ON THE OFFICIAL MAJOR STREET PLAN, THE FRONT YARD SHALL BE MEASURED FROM THE PROPOSED RIGHT–OF–WAY LINE.

F. SIDE YARD: A TOTAL OF 15 FEET; ONE SIDE WAY BE REDUCED TO NOT LESS THAN 7 FEET; 15 FEET FOR ANY OTHER PRINCIPAL BUILDING

G. REAR YARD: DWELLING – 30 FEET ANY OTHER PRINCIPAL BUILDING – 40 FEET

K. MAXIMUM BUILDING HEIGHT: 40 FEET EXCEPT THAT RADIO COMMUNICATION TOWERS CONSTRUCTED IN COMPLIANCE WITH 221.1 OF THE WAUKEE MUNICIPAL CODE MAY NOT EXCEED 45 FEET IN HEIGHT.

L. MAXIMUM STORIES: PRINCIPAL BUILDING – 3 STORIES ACCESSORY BUILDING – 1 STORY

M. MORE THAN ONE DWELLING UNIT ON A LOT: WHERE MORE THAN ONE PRINCIPAL BUILDING IS CONSTRUCTED ON A LOT SUCH PRINCIPAL BUILDINGS SHALL BE SEPARATED BY NOT LESS THAN 40 FEET AND THE FRONT, REAR AND SIDE YEARS SHALL BE DETERMINED CONSIDERING ALL PRINCIPAL BUILDINGS AS ONE UNIT

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 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.

CIVIL DESIGN ADVANTAGE
3405 SE CROSSROADS DR. SUITE G, GRIMES, IOWA 50111
PH: (515) 369-4400 Fax: (515) 369-4410

PROJECT NO. 1411.577

GENERAL LEGEND

PROPOSED

ITEM	SYMBOL
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	ST
TYPE SW–401 STORM MANHOLE	ST
TYPE SW–402 STORM MANHOLE	ST
TYPE SW–301 SANITARY MANHOLE	S
STORM/SANITARY CLEANOUT	C
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 S
STORM SEWER	
STORM SERVICE	ST ST ST
WATERMAIN WITH SIZE	8"W
WATER SERVICE	W W W
SAWCUT (FULL DEPTH)	
SILT FENCE	
USE AS CONSTRUCTED	U.A.C.
MAIL BOX PAD	M
DOWNSPOUT LOCATION	
FRONT GARAGE FINISHED FLOOR ELEVATION	G.F.E.
MINIMUM PROTECTION ELEVATION	M.P.E.

EXISTING

ITEM	SYMBOL
SANITARY MANHOLE	
WATER VALVE BOX	
FIRE HYDRANT	
WATER CURB STOP	W
WELL	WELL
STORM SEWER MANHOLE	ST
STORM SEWER SINGLE INTAKE	
STORM SEWER DOUBLE INTAKE	
FLARED END SECTION	
ROOF DRAIN/ DOWNSPOUT	RD
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	E
ELECTRIC TRANSFORMER	E
ELECTRIC MANHOLE OR VAULT	E
TRAFFIC SIGN	
TELEPHONE JUNCTION BOX	T
TELEPHONE MANHOLE/VAULT	T
TELEPHONE POLE	
GAS VALVE BOX	G
CABLE TV JUNCTION BOX	TV
CABLE TV MANHOLE/VAULT	TV
MAIL BOX	M
BENCHMARK	BM
SOIL BORING	SB
UNDERGROUND TV CABLE	TV
GAS MAIN	G G
FIBER OPTIC	FO
UNDERGROUND TELEPHONE	T T
OVERHEAD ELECTRIC	OE
UNDERGROUND ELECTRIC	E E
FIELD TILE	TILE
SANITARY SEWER W/ SIZE	8"S
STORM SEWER W/ SIZE	15" RCP
WATER MAIN W/ SIZE	8"W

THE PROJECT REQUIRES AN IOWA NPDES PERMIT #2. 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 MOST RECENT EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2015 EDITION OF SUDAS STANDARD SPECIFICATIONS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN. THE WAUKEE STANDARD SPECIFICATIONS SHALL GOVERN IN THE EVENT OF CONTRASTING REQUIREMENTS.

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. THE WAUKEE STANDARD SPECIFICATIONS SHALL GOVERN IN THE EVENT OF CONTRASTING REQUIREMENTS.

LICENSED PROFESSIONAL ENGINEER
ERIN K. OLLENDIKE
16926
IOWA

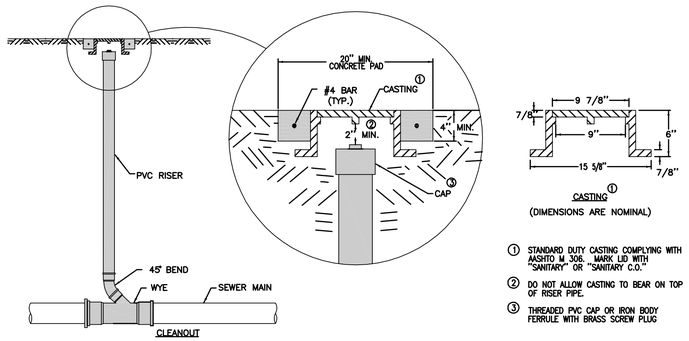
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

ERIN K. OLLENDIKE, P.E. DATE

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2017
PAGES OR SHEETS COVERED BY THIS SEAL:
SHEETS 1–13

PRELIMINARY
NOT FOR CONSTRUCTION

ALICE PATRICIA HOMES



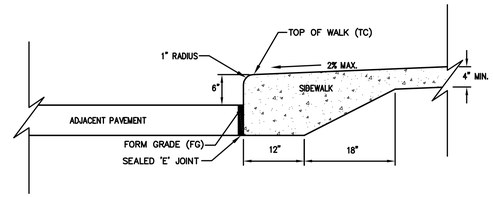
① STANDARD DUTY CASTING COMPLYING WITH AASHTO M.306. MARK LID WITH "SANITARY" OR "SANITARY C.O."

② DO NOT ALLOW CASTING TO BEAR ON TOP OF RISER PIPE.

③ THREADED PVC CAP OR IRON BODY FERRULE WITH BRASS SCREW PLUG

SW-203 SANITARY CLEANOUT

NOT TO SCALE



CLASS 'A' 6" CURB AND SIDEWALK

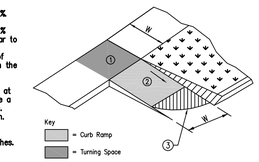
NOT TO SCALE

① Perpendicular Curb Ramp: Target running slaped of 6.25% with a maximum running slope of the 8.3%

② Turning Space: Target slope of 1.5% with a maximum slope perpendicular to the travel directions of 2.0%. At mid-block crossings, cross slope of landing may exceed 2.0% to match the roadway grade. Min. 5'x5'.

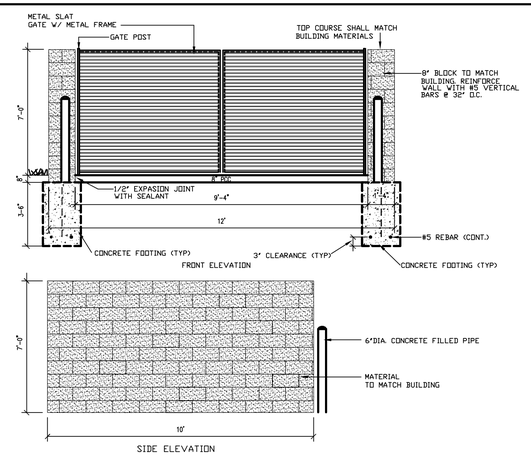
③ Provide an area of special shaping at the bottom of the ramp to provide a smooth transition to the gutterline. 2% maximum slope in any direction.

④ The minimum pavement depth for ramps and landings shall be 6-inches.



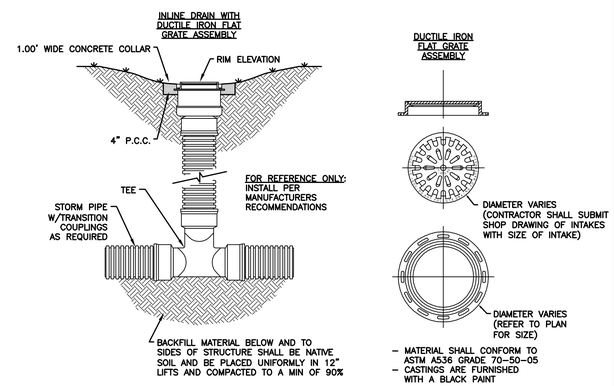
PERPENDICULAR CURB RAMP @ CLASS 'A' INTEGRAL CURB

NOT TO SCALE



DUMPSTER ENCLOSURE DETAIL

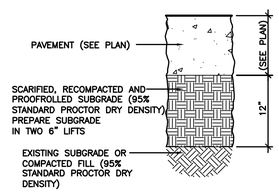
NOT TO SCALE



- MATERIAL SHALL CONFORM TO ASTM A536 GRADE 70-50-05
- CASTINGS ARE FURNISHED WITH A BLACK PAINT

NYLOPLAST INLINE DRAIN

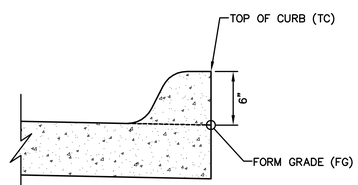
NOT TO SCALE



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

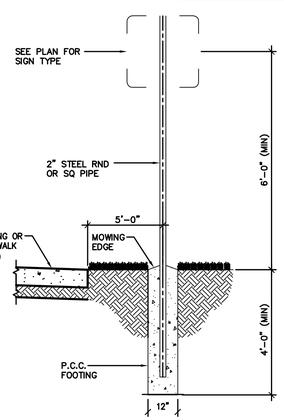
12" SUBGRADE PREPARATION

NOT TO SCALE



INTEGRAL 6" STANDARD CURB SPOT ELEVATION REFERENCE DETAIL

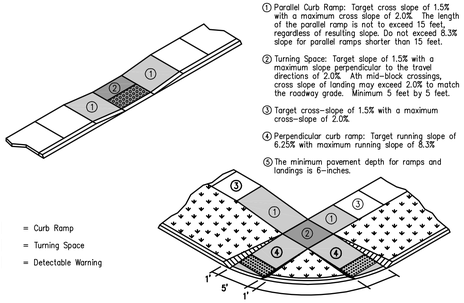
NOT TO SCALE



NOTE:
THE CONTRACTOR WILL FURNISH ALL SIGN PANELS AND SHALL INSTALL SIGNS AND FURNISH ALL OTHER MATERIALS, INCLUDING, BUT NOT LIMITED TO, POSTS, FASTENERS, AND FOOTINGS.

TYPICAL SIGN POST

NOT TO SCALE



① Parallel Curb Ramp: Target cross slope of 1.5% with a maximum cross slope of 2.0%. The length of the parallel ramp is not to exceed 15 feet, regardless of resulting slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.

② Turning Space: Target slope of 1.5% with a maximum slope perpendicular to the travel directions of 2.0%. Ath mid-block crossings, cross slope of landing may exceed 2.0% to match the roadway grade. Minimum 5 feet by 5 feet.

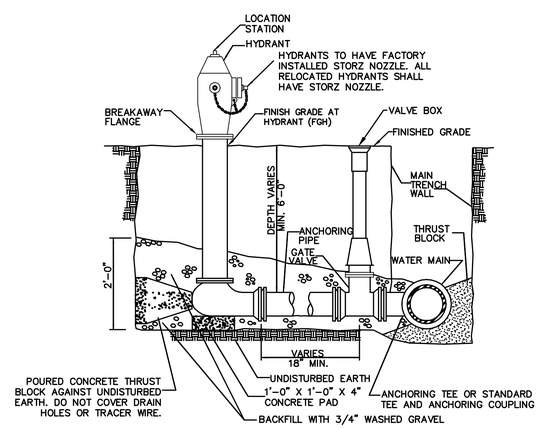
③ Target cross-slope of 1.5% with a maximum cross-slope of 2.0%

④ Perpendicular curb ramp: Target running slope of 6.25% with maximum running slope of 8.3%

⑤ The minimum pavement depth for ramps and landings is 6-inches.

CURB RAMPS OUTSIDE OF INTERSECTION RADIUS

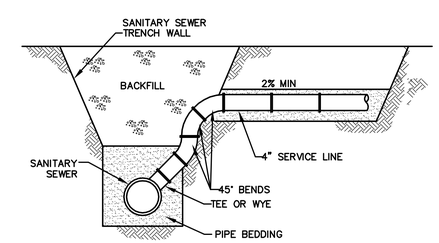
NOT TO SCALE



NOTES
1. MINIMUM SIZE FOR PIPING, VALVES AND FITTINGS FROM WATER MAIN TO HYDRANT INLET: 6".
2. PROVIDE TRACER WIRE AND TRACER WIRE STATION.
3. WRAP HYDRANT, PIPE AND FITTINGS WITH POLYETHYLENE ENCASEMENT.

HYDRANT ASSEMBLY DETAIL

NOT TO SCALE



NOTES:
1. USE FOR SERVICE CONNECTION WHEN SANITARY SEWER DEPTH EXCEEDS 12.0'
2. STOP ALL GRANULAR BACKFILL AND BEDDING 10' FROM THE END OF THE SERVICE.

SANITARY SEWER SERVICE RISER

NOT TO SCALE

REVISIONS	DATE
THIRD SUBMITTAL	04/21/16
SECOND SUBMITTAL	10/13/15
FIRST SUBMITTAL	08/18/15

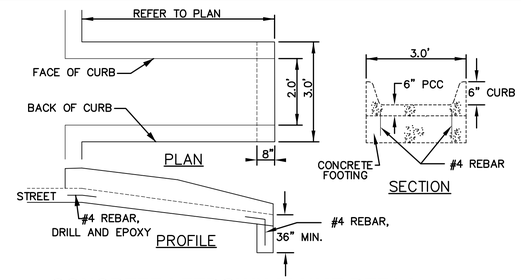
3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: EKO | EI: JMM
CIVIL DESIGN ADVANTAGE

ALICE PATRICIA HOMES

DETAILS

WAUKEE, IOWA

FILE: H:\2014\141577\DWG\141577-SITE.DWG
FILE DATE: 4/21/16
PLOTTED BY: JARED MORRAY
DATE PLOTTED: 4/21/2016 9:32 AM
TEXT:
COMMENT: ENG

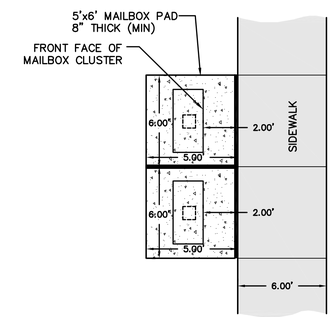


CONCRETE LETDOWN FLUME DETAIL

NOT TO SCALE

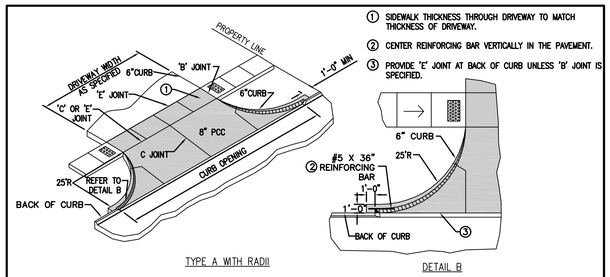
INSTALLATION NOTE:

1. MAILBOX PADS TO BE INSTALLED BY DEVELOPER.
2. CLUSTER MAILBOX TO BE LOCATED BETWEEN THE BUILDING AND SIDEWALK.
3. DETERMINE SIDEWALK SIDE OF MAILBOX PAD ELEVATION ASSUMING CONSTANT 4% SLOPE FROM BACK OF CURB TO SIDEWALK SIDE OF MAILBOX PAD. RESULTING SLOPE FROM BACK OF CURB TO STREET SIDE OF MAILBOX PAD WILL BE GREATER THAN 4%. FOR EXAMPLE, FOR A 29' WIDE PAVEMENT WITH A 60' WIDE R.O.W. AND A 2% MAILBOX PAD CROSS SLOPE, THE RESULTING SLOPE FROM THE BACK OF CURB TO THE STREET SIDE OF MAILBOX PAD IS 6.2%.



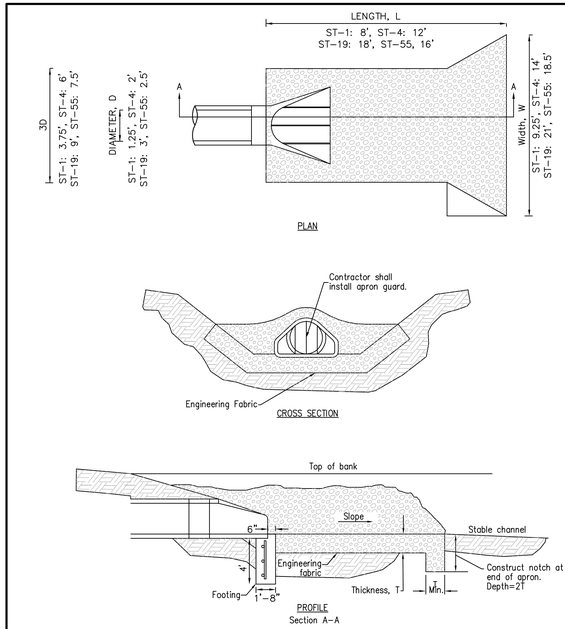
MAILBOX PAD DETAIL

NOT TO SCALE



1. SIDEWALK THICKNESS THROUGH DRIVEWAY TO MATCH THICKNESS OF DRIVEWAY.
2. CENTER REINFORCING BAR VERTICALLY IN THE PAVEMENT.
3. PROVIDE 'E' JOINT AT BACK OF CURB UNLESS 'B' JOINT IS SPECIFIED.

PRIVATE DRIVE CONNECTION DETAIL

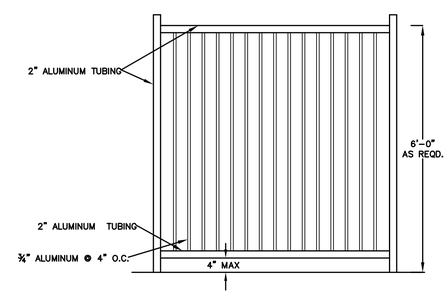


NOTE:

1. THE LAST THREE SECTIONS AND THE APRON SHALL BE CONNECTED WITH PIPE CONNECTIONS PER SECTION 4030.302C OF SUDAS.
2. INSTALL A 3' CLAY WATERSTOP AT ALL STORM SEWER OUTLETS.

ROCK APRON FOR PIPE OUTLET

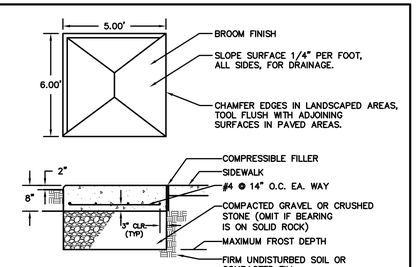
NOT TO SCALE



NOTE: INSTALL FOOTING PER MANUFACTURER'S RECOMENDATION

6' POOL FENCE

NOT TO SCALE



GENERAL NOTES

1. CONCRETE: C4 MIX.
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 BY DEVELOPER.

MAILBOX PAD DETAIL

NOT TO SCALE

REVISIONS	DATE
THIRD SUBMITTAL	04/21/16
SECOND SUBMITTAL	10/13/15
FIRST SUBMITTAL	08/18/15

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

ALICE PATRICIA HOMES

DETAILS

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FILE DATE: 4/21/16
PLOTTED BY: JARED WARNOCK
DATE PLOTTED: 4/21/2016 9:32 AM
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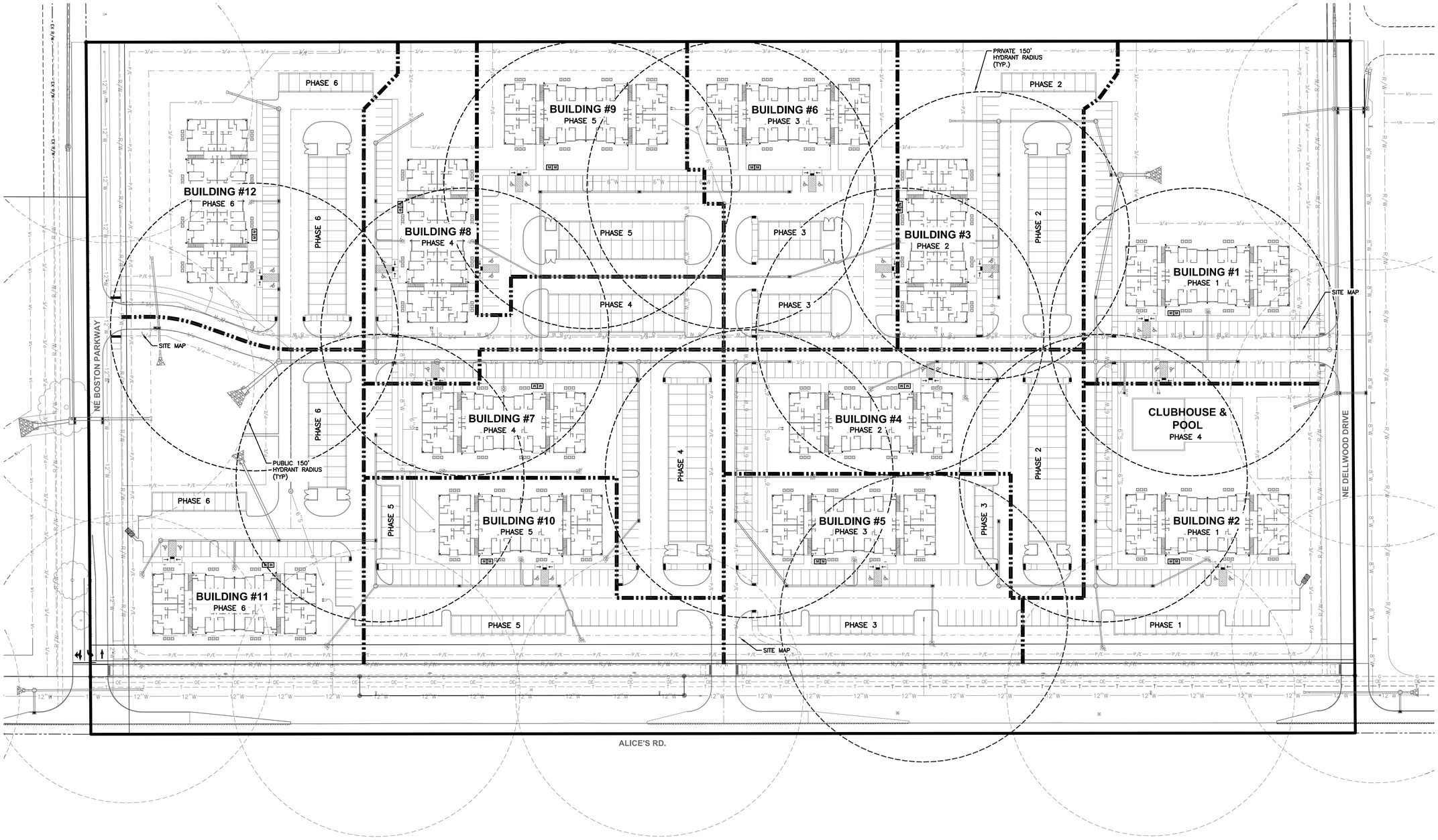

NOTES:

1. ALL UTILITIES AN PAVING WILL BE CONSTRUCTED WITH EACH PHASE.
2. SIDEWALKS LEADING TO EACH BUILDING WILL BE CONSTRUCTED WITH EACH BUILDING.
3. DUMPSTERS WILL BE CONSTRUCTED AT THE TIME THE BUILDING WITHIN THAT PHASE IS CONSTRUCTED.

ADDRESSING

BUILDING #1:	720 NE ALICE'S ROAD
CLUBHOUSE:	714 NE ALICE'S ROAD
BUILDING #2:	710 NE ALICE'S ROAD
BUILDING #3:	670 NE ALICE'S ROAD
BUILDING #4:	680 NE ALICE'S ROAD
BUILDING #5:	700 NE ALICE'S ROAD
BUILDING #6:	690 NE ALICE'S ROAD
BUILDING #7:	660 NE ALICE'S ROAD
BUILDING #8:	650 NE ALICE'S ROAD
BUILDING #9:	640 NE ALICE'S ROAD
BUILDING #10:	630 NE ALICE'S ROAD
BUILDING #11:	610 NE ALICE'S ROAD
BUILDING #12:	620 NE ALICE'S ROAD

SCALE
0' 25' 50' 100'

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WAUKEE, IOWA

ALICE PATRICIA HOMES
PHASING AND HYDRANT COVERAGE PLAN

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FILE DATE: 4/21/16
PLOTTED BY: JARED MURRAY
DATE PLOTTED: 4/21/2016 9:33 AM
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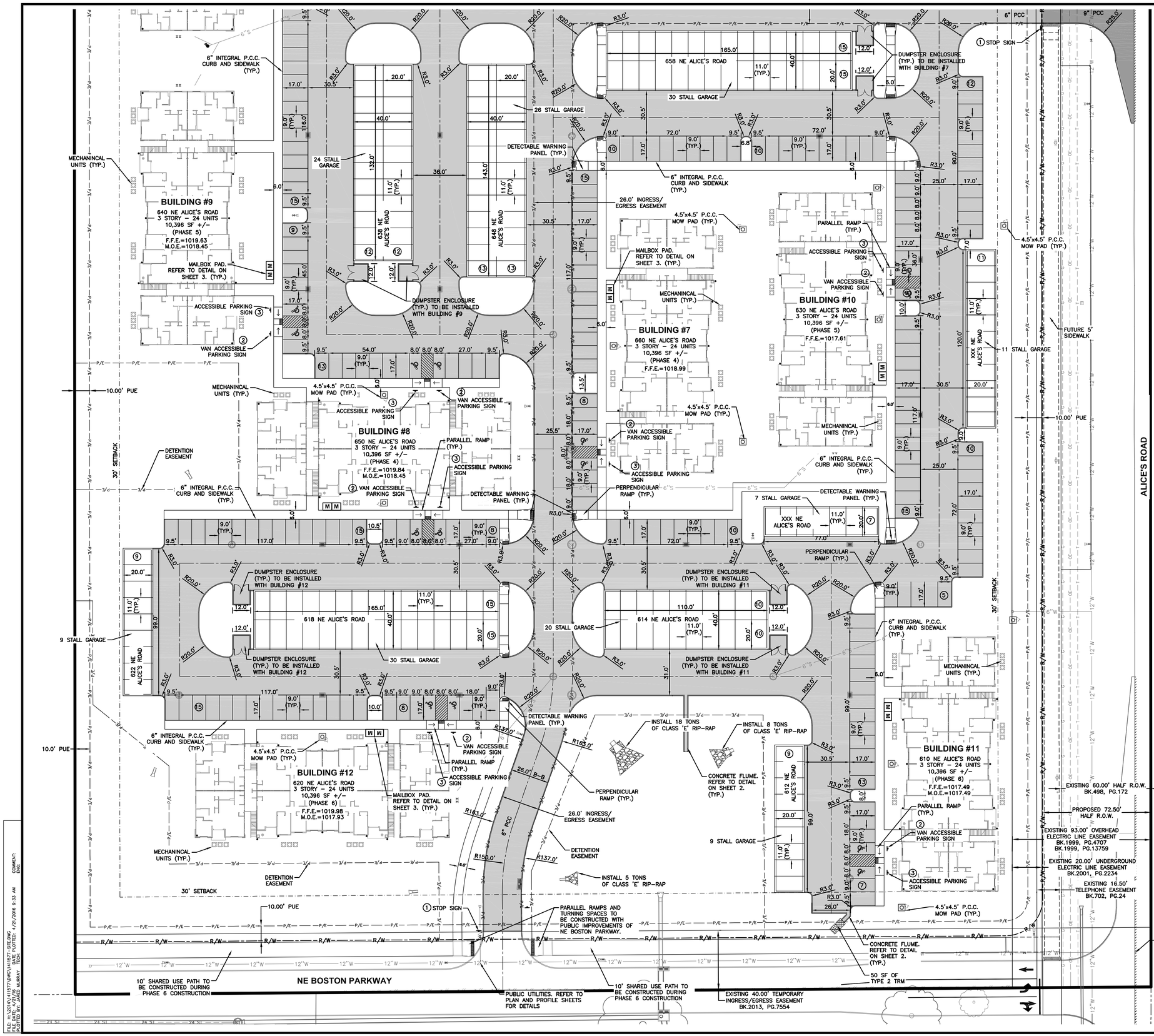


GENERAL NOTES

1. ALL CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.
2. ALL WORK SHALL COMPLY WITH ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.
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 UTILITIES CONTRACTOR SHALL NOTIFY THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
6. ALL CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS.
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 INCH EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/SIDEWALKS AND BUILDING. PLACE 1/2 INCH EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C. PAVEMENT.
10. SAWCUT AND REMOVE 6 INCHES OF PAVEMENT ON ALICE'S ROAD TO FULL DEPTH TO CREATE A CLEAN EDGE.
11. REMOVE ALL DEBRIS AND MUD SPILLED INTO R.O.W. AT THE END OF EACH WORK DAY AND PRIOR TO A RAIN EVENT.
12. ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
13. DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE RIGHT OF WAY.
14. 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.
15. 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. ANY PAVEMENT REPLACEMENT SHALL COMPLY WITH THE WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
16. 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.
17. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN SUPPLIERS AND SUBCONTRACTORS INVOLVED IN THE PROJECT, INCLUDING STAGING OF CONSTRUCTION DETAILS.
18. ALL SCOUR STOP SHALL BE INSTALLED BY A CERTIFIED CONTRACTOR ACCORDING TO SCOUR STOP PRODUCT SPECIFICATIONS.
19. ALL PERMITS AND ADDITIONAL FEES REQUIRED TO COMPLETE THE WORK SHALL BE INCLUDED IN THE CONTRACT BID.
20. MONUMENT SIGNS ARE TO BE REVIEWED AND APPROVED BY THE DEVELOPMENT SERVICES DEPARTMENT.
21. ALL STAKING IS TO BE DONE UNDER THE DIRECTION OF A LICENSED ENGINEER OR SURVEYOR.
22. IT IS THE CONTRACTORS RESPONSIBILITY TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY OF WAUKEE DEVELOPMENT SERVICES DEPARTMENT AT LEAST ONE WEEK PRIOR TO CONSTRUCTION ACTIVITIES COMMENCING.
23. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE CITY OF WAUKEE DEVELOPMENT SERVICES DEPARTMENT 72 HOURS PRIOR TO ANY PLANNED WEEKEND OR HOLIDAY WORK.
24. AN AS-BUILT SITE PLAN ILLUSTRATING THE LOCATION AND DEPTHS OF SITE UTILITIES AND GRADES FOR DRAINAGE SWALES, DETENTION FACILITIES AND FFE'S SHALL BE PROVIDED IN PDF FORM AND HARD COPY UPON COMPLETION OF EACH PHASE OF DEVELOPMENT TO THE CITY WAUKEE'S DEVELOPMENT SERVICES DEPARTMENT.

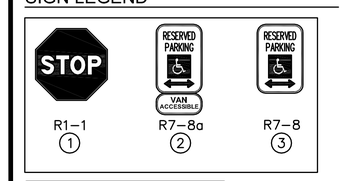
TRAFFIC CONTROL NOTES

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 (M.U.T.C.D.).
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 CLOSED SIGNS REQUIRED FOR ALL SIDEWALK CLOSURES. SIGNAGE AND TEMPORARY PEDESTRIAN ACCESS ROUTE THROUGH CONSTRUCTION AREA SHALL MEET THE REQUIREMENTS OF PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG), SECTION R205 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. (C-4 MIX)
2. DRIVEWAYS	6" P.C.C. (C-4 MIX)
3. DRIVE APPROACH WITHIN NE BOSTON PARKWAY AND NE DELLWOOD DRIVE ROW	8" P.C.C. (C-4 MIX)
4. PRIVATE DRIVE APPROACH WITHIN ALICE'S ROAD ROW	9" P.C.C. (C-4 MIX)

SIGN LEGEND



• • • N O T E • • •
THE APARTMENT UNITS THAT ARE SHOWN ARE FOR REFERENCE PURPOSES ONLY. FINAL UNIT TYPE IS SUBJECT TO CHANGE. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS.

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PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: EKO | EI: JMM
CIVIL DESIGN ADVANTAGE

ALICE PATRICIA HOMES
DIMENSION PLAN

WAUKEE, IOWA

1411.577

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FILE DATE: 4/21/16
PLOTTED BY: JARED WORKMAN
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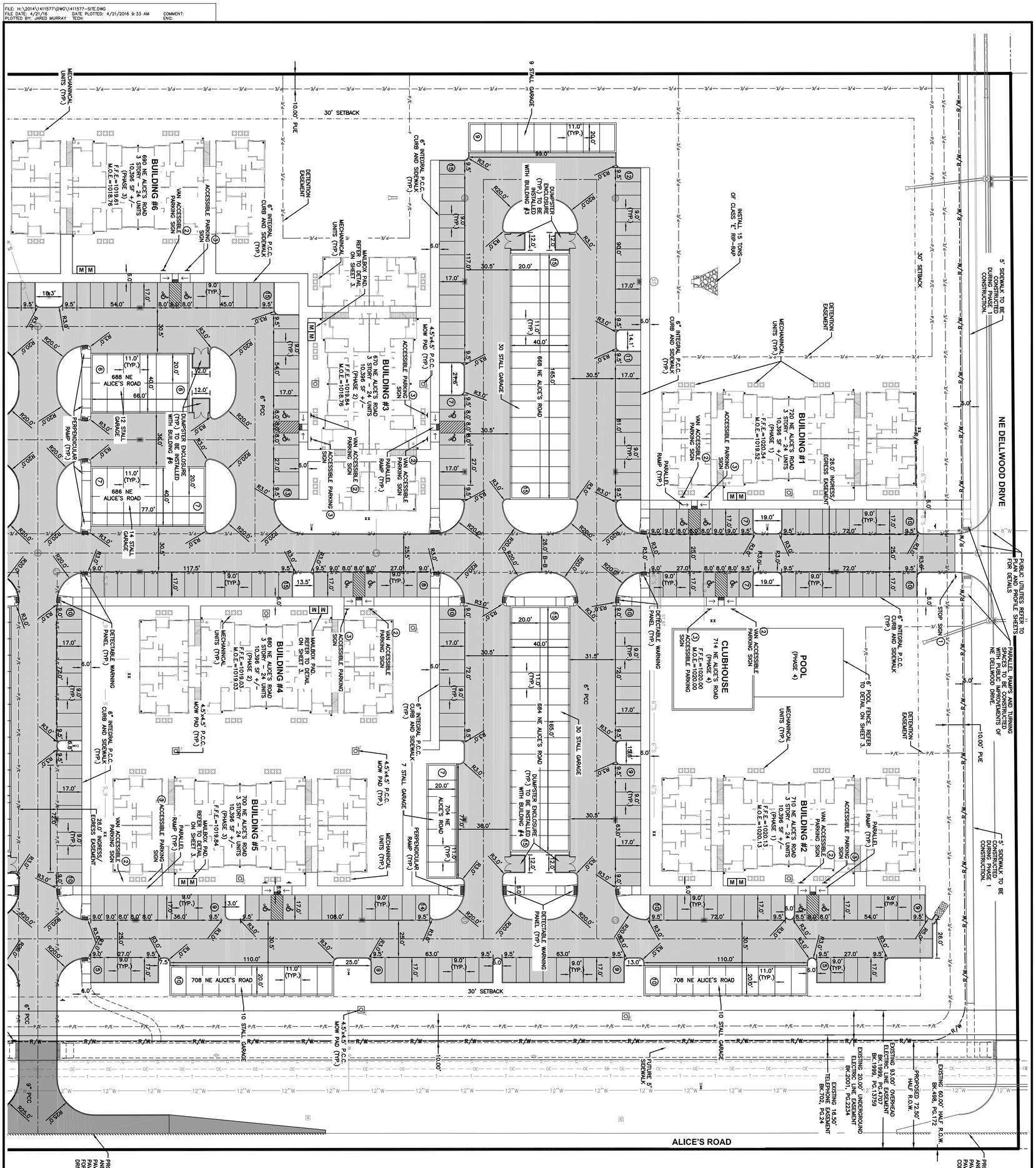

PROVIDE FULL-DEPTH SAW CUT AND REMOVE 6-INCHES OF EXISTING PAVEMENT ALONG ALICE'S ROAD FOR PAVING TIE-IN. REFER TO SHEET 13 FOR CONSTRUCTION DETAILS OF PRIVATE DRIVE CONNECTION.

PROVIDE FULL-DEPTH SAW CUT AND REMOVE 6-INCHES OF EXISTING PAVEMENT ALONG ALICE'S ROAD FOR PAVING TIE-IN. REFER TO PUBLIC CONSTRUCTION DRAWINGS FOR DETAILS.

SCALE 0' 15' 30' 60'

ALICE PATRICIA HOMES

DIMENSION PLAN

WAUKEE, IOWA

CIVIL DESIGN ADVANTAGE

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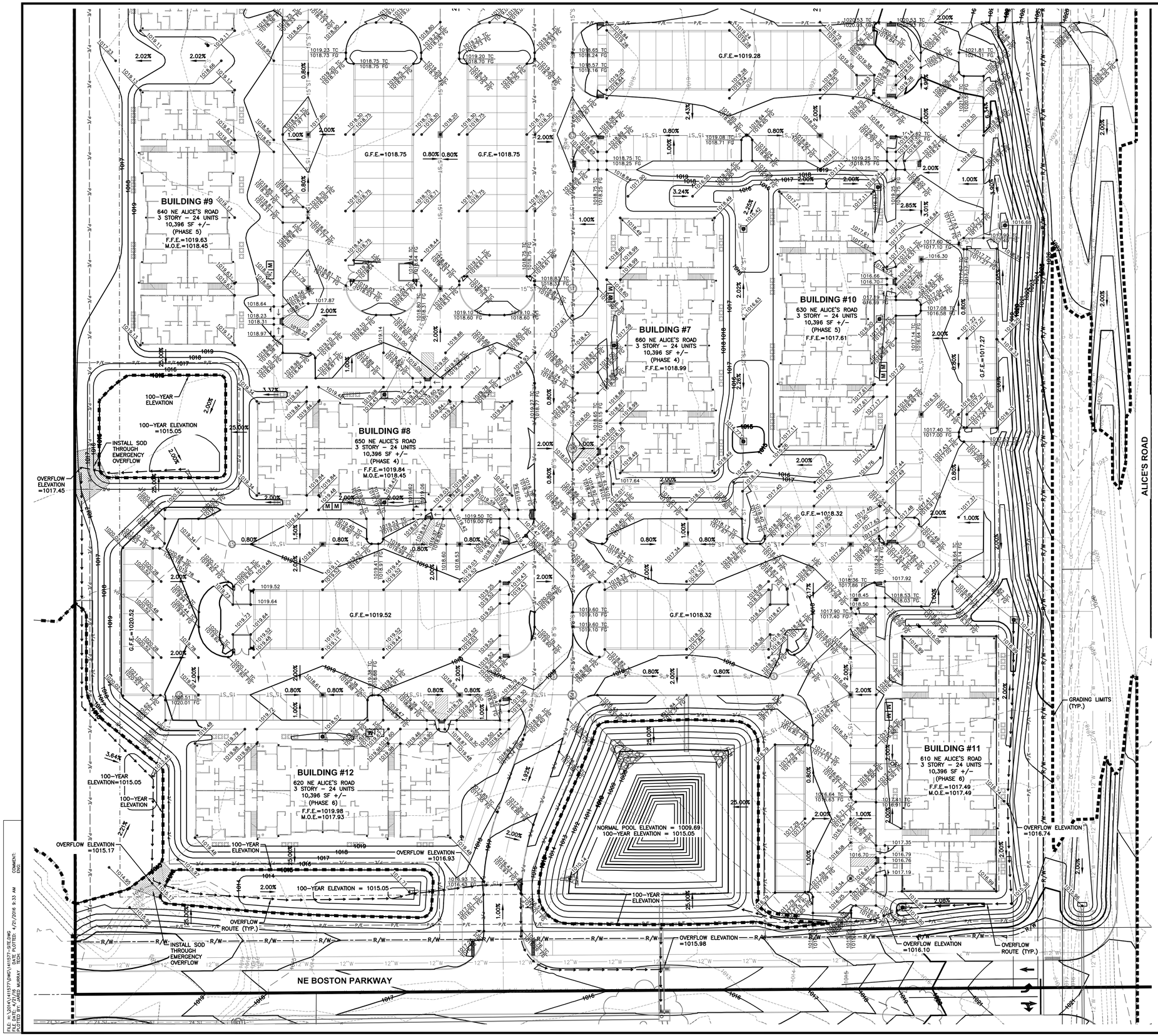

GRADING NOTES

1. THE COMPLETION AND APPROVAL OF THE COSESCO PERMIT SHALL BE PROVIDED TO THE CITY OF WAUKEE BUILDING DIVISION AND STORM WATER DEPARTMENT PRIOR TO ANY GRADING ACTIVITIES.
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 CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS, IF APPLICABLE,
4. MATCH 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 0.8% MINIMUM AND 5% MAXIMUM LONGITUDINAL SLOPES ON ALL PAVED WALKWAYS. ALL WALKS TO HAVE 2.0% MAXIMUM TRANSVERSE SLOPE IN THE DIRECTION OF NATURAL DRAINAGE. SAW CUT 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 (IF APPLICABLE), INSTALLATION OF THE ORIFICE PLATE AND INSTALLATION OF THE TEMPORARY STAND PIPE 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 POSSIBLE.
14. A CERTIFIED AS–BUILT GRADING PLAN OF THE DETENTION BASIN AND DRAINAGE SWALES SHALL BE SUBMITTED TO THE CITY OF WAUKEE UPON COMPLETION OF THE SITE IMPROVEMENTS FOR EACH PHASE OF CONSTRUCTION PRIOR TO FINAL ACCEPTANCE.
15. CONSTRUCTION OPERATIONS SHALL PROTECT STORM SEWERS AND DRAINAGE WAYS FROM ALLOWING SLURRY FROM CONCRETE OPERATIONS TO DISCHARGE OFFSITE.

* * * NOTE * * *

G.F.E. = FINISHED FLOOR ELEVATION AT THE FRONT OF THE GARAGE DOOR. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS ON SLOPE THROUGH GARAGE.

AREA OF DISTURBANCE=18.86

SCALE
0' 15' 30' 60'

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ALICE PATRICIA HOMES
GRADING PLAN

WAUKEE, IOWA

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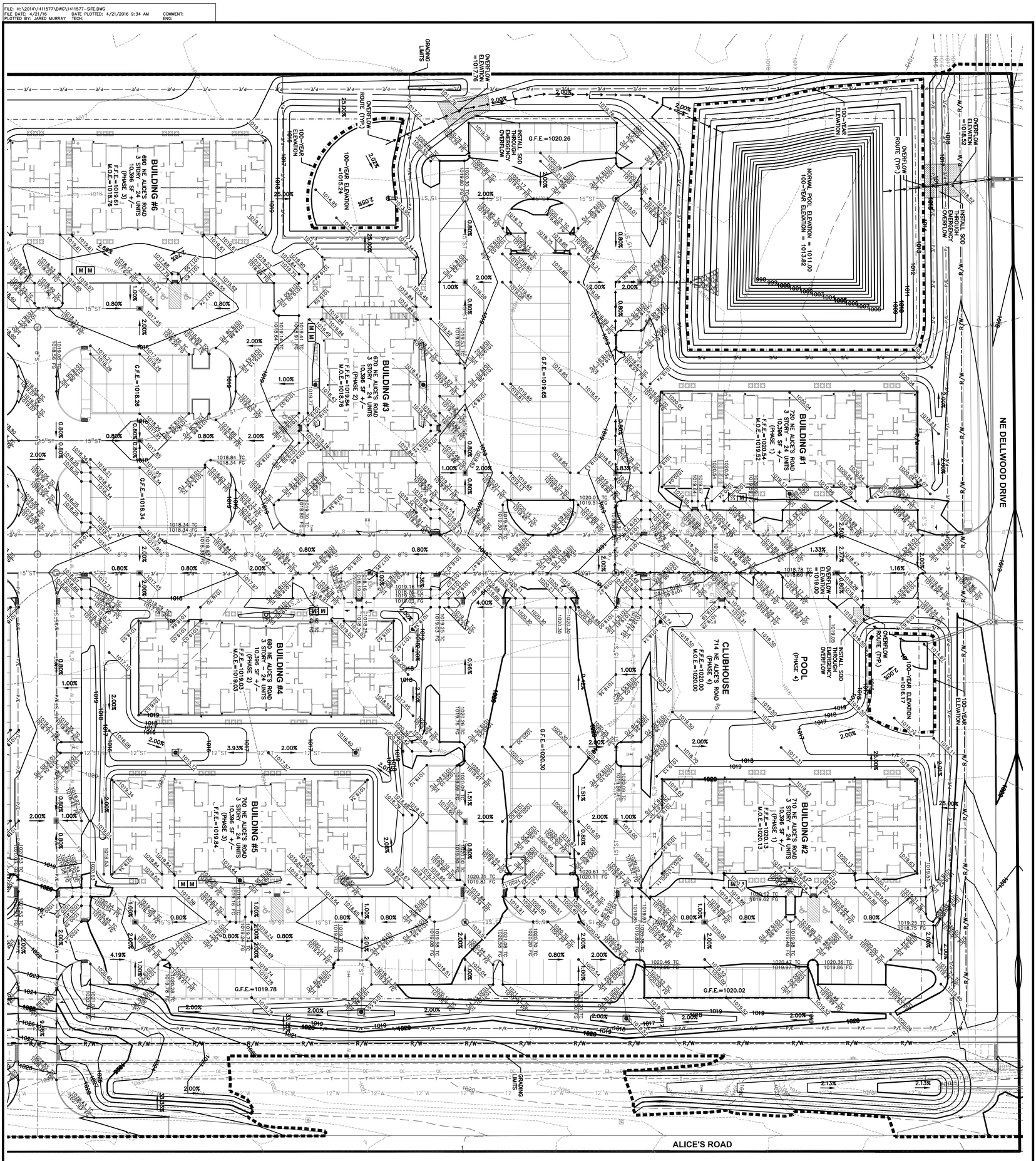

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ALICE PATRICIA HOMES

GRADING PLAN

WAUKEE, IOWA

CIVIL DESIGN ADVANTAGE

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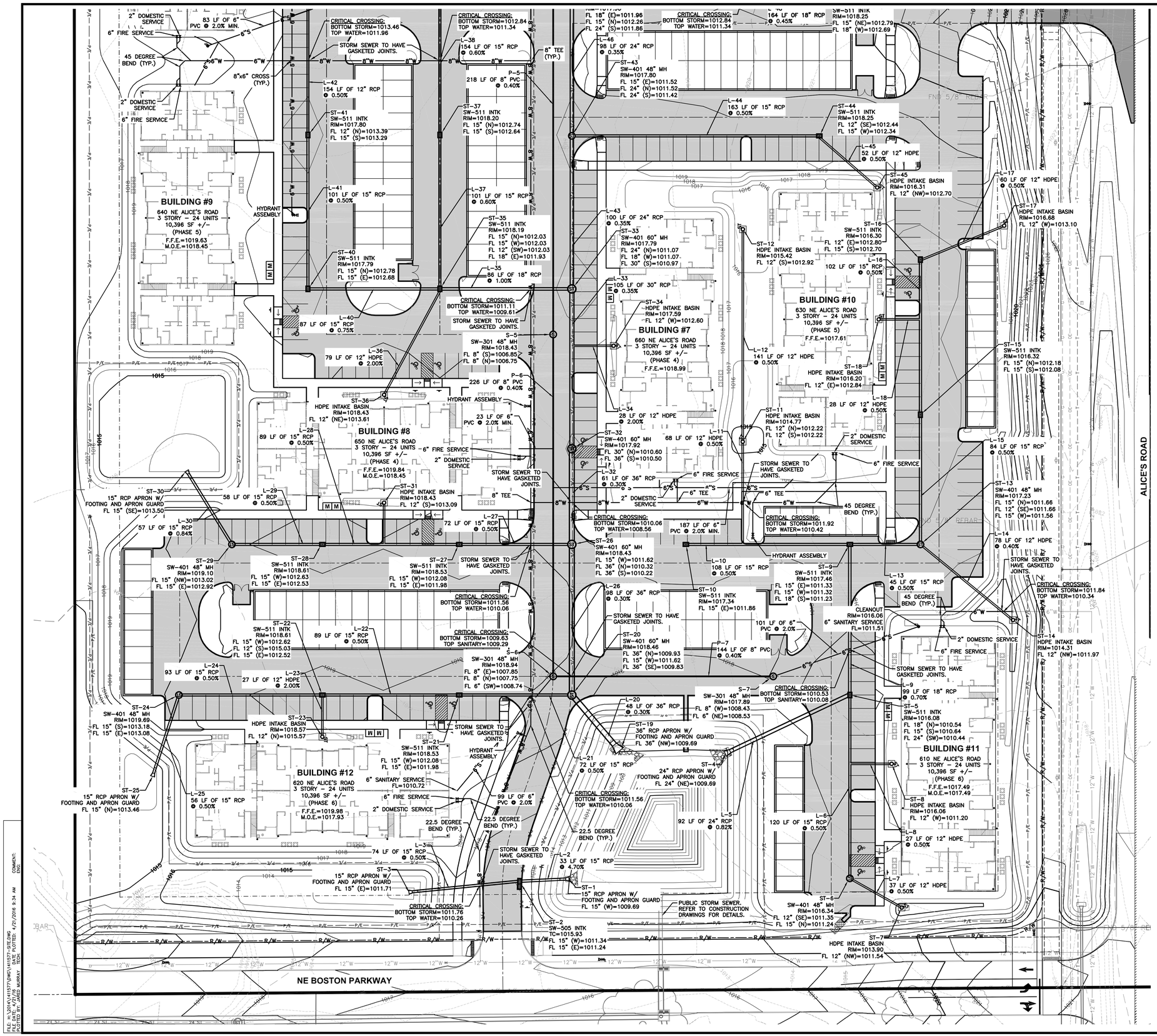

UTILITY NOTES

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. REFER 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 TRENCHES ACCORDING TO THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND ALL CITY OF WAUKEE STANDARD SPECIFICATIONS. MAINTAIN A MINIMUM OF 6.0' COVER OVER ALL WATERMAINS.
5. ALL UTILITIES SHALL BE STUBBED TO 5 FEET FROM BUILDINGS. REFER TO MEP PLANS FOR DESIGN FROM 5' OUTSIDE OF BUILDING FACE.
6. ADJUST ALL MANHOLES AND INTAKES TO FINISHED GRADES. INSTALL CHIMNEY SEALS ON ANY ADJUSTED MANHOLES. ALL PROPOSED SANITARY MANHOLES ARE TO UTILIZE A TYPE "B" CASTING.
7. ALL SANITARY SEWER AND WATER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
8. 18" MINIMUM VERTICAL CLEARANCE BETWEEN STORM SEWER AND SANITARY SEWER PIPES. 18" MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER AND WATER MAIN.
9. MAINTAIN A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER MAINS.
10. 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.
11. ALL WATERMAIN WORK, PUBLIC OR PRIVATE SHALL BE DONE IN ACCORDANCE WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS.
12. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
13. PRIVATE UTILITIES TO BE INSTALLED PER THE CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE LATEST VERSION OF THE UNIFORM PLUMBING CODE. CONTACT BUILDING INSPECTION A MINIMUM OF 24 HOURS IN ADVANCE FOR UTILITY INSTALLATION INSPECTIONS. ALL APPLICABLE UTILITY COMPANIES SHALL BE CONTACTED 48 HOURS PRIOR TO ANY WORK BEING STARTED.
14. OWNER IS RESPONSIBLE FOR MAINTENANCE OF PRIVATE RETENTION FACILITIES AND PRIVATE UTILITIES.
15. 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 SEDIMENT CONTROLS AT ALL PERMANENT STORM SEWER INLETS. DROP DOWN INLET PROTECTION IS REQUIRED FOR PUBLIC STREETS.
16. CONTRACTOR SHALL TEST AND INSPECT ALL PROPOSED STORM SEWER, WATERMAIN AND SANITARY SEWER. THE CITY OF WAUKEE ENGINEERING DEPARTMENT IS REQUIRED TO WITNESS TESTING. ALL TESTING SHALL BE COMPLETED MEETING CITY OF WAUKEE STANDARDS.
17. ALL UTILITY TIE-INS TO EXISTING PUBLIC UTILITIES SHOULD BE COORDINATED WITH THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
18. ALL PRIVATE AND PUBLIC SANITARY SEWER AND STORM SEWER PIPES SHALL BE CLEANED OUT AND TELEVISED PRIOR TO PAVING. ALL SANITARY MANHOLES SHALL BE VACUUMED TESTED. A HARD COPY OF THE REPORT AND VIDEO SHALL BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
19. ALL CONNECTIONS TO EXISTING SANITARY SEWER MANHOLES SHALL BE CORE DRILLED AND A LINK SEAL SHALL BE USED FOR THE CONNECTION.
20. IT IS THE OWNER'S RESPONSIBILITY TO COORDINATE IRRIGATION AND METER PITS WITH THE WAUKEE PUBLIC WORKS DEPARTMENT.
21. ALL HYDRANTS SHALL HAVE STORZ FITTINGS.

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ALICE PATRICIA HOMES

UTILITY PLAN

WAUKEE, IOWA

SCALE 0' 15' 30' 60'

1411.577

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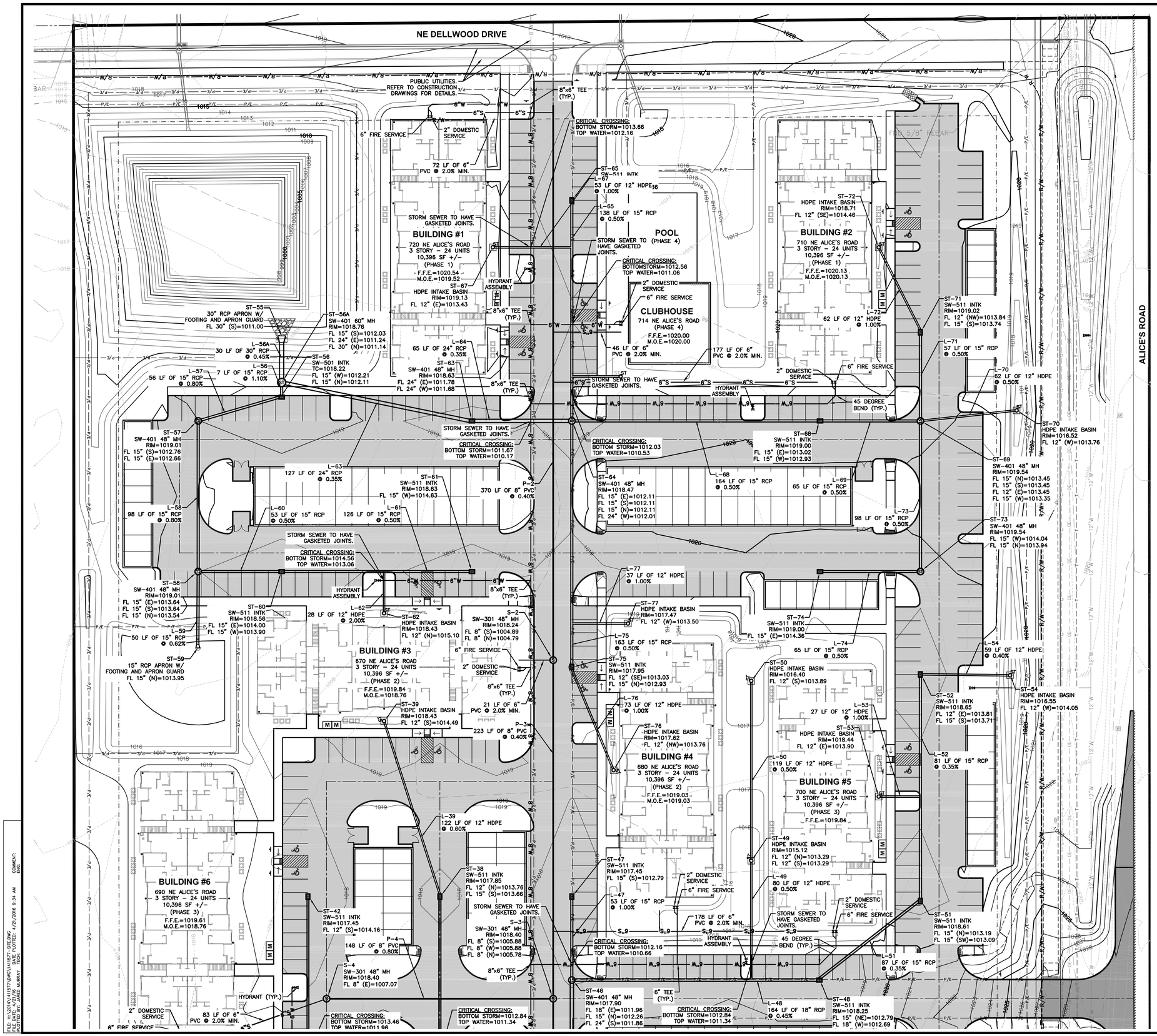

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UTILITY PLAN

10/14

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FILE DATE: 4/21/16
PLOTTED By: JAMES BURRUS
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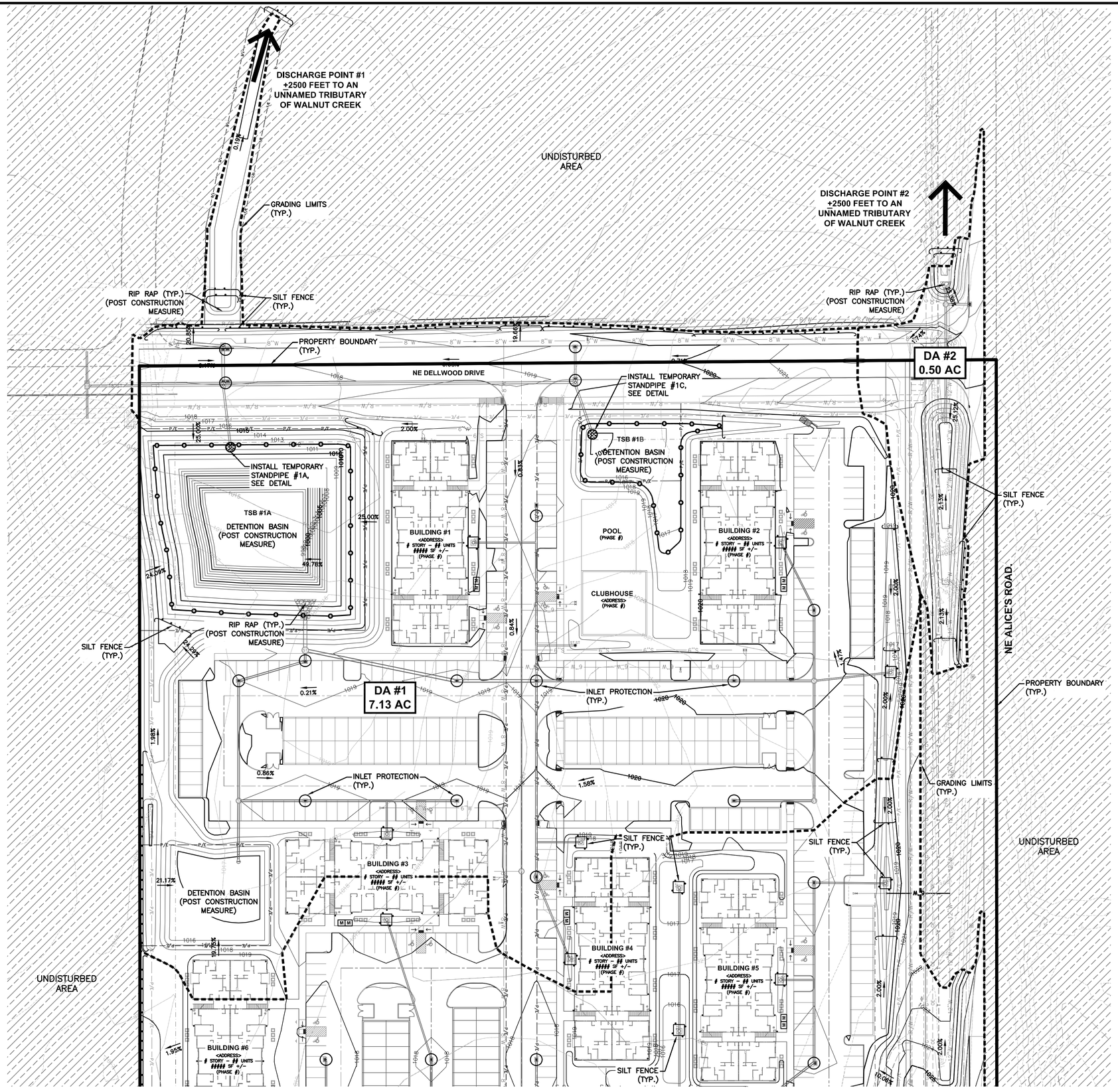
TEST
COMMENT: EKO



DISCHARGE POINT SUMMARY

DISCHARGE POINT #1 TO AN UNNAMED TRIBUTARY OF WALNUT CREEK ±2500 FT

TOTAL AREA DISTURBED TO DISCHARGE POINT	7.13 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	25,668 CU FT
VOLUME PROVIDED IN SILT FENCE (982 LF @ 4.5 CU FT/LF OF FENCE)	4,419 CU FT
VOLUME PROVIDED IN SILT FENCE WITHIN SWALES (270 LF @ 15 CU FT/LF)	4,050 CU FT
VOLUME PROVIDED IN TSB #1A	71,364 CU FT
VOLUME PROVIDED IN TSB #1B	12,818 CU FT
TOTAL VOLUME PROVIDED	92,651 CU FT

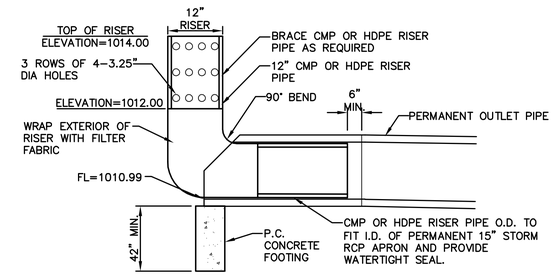
DISCHARGE POINT SUMMARY

DISCHARGE POINT #2 TO AN UNNAMED TRIBUTARY OF WALNUT CREEK ±2500 FT

TOTAL AREA DISTURBED TO DISCHARGE POINT	0.50 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	1,800 CU FT
VOLUME PROVIDED IN SILT FENCE (113 LF @ 4.5 CU FT/LF OF FENCE)	509 CU FT
VOLUME PROVIDED IN SILT FENCE WITHIN SWALES (104 LF @ 15 CU FT/LF)	1,560 CU FT
TOTAL VOLUME PROVIDED	2,069 CU FT

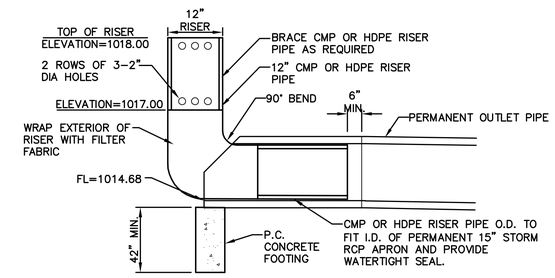
TEMPORARY STAND PIPE DETAIL #1A

NOT TO SCALE



TEMPORARY STAND PIPE DETAIL #1B

NOT TO SCALE



SCALE
0' 20' 40' 80'

REVISIONS	DATE
THIRD SUBMITTAL	04/21/16
SECOND SUBMITTAL	10/13/15
FIRST SUBMITTAL	08/18/15

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
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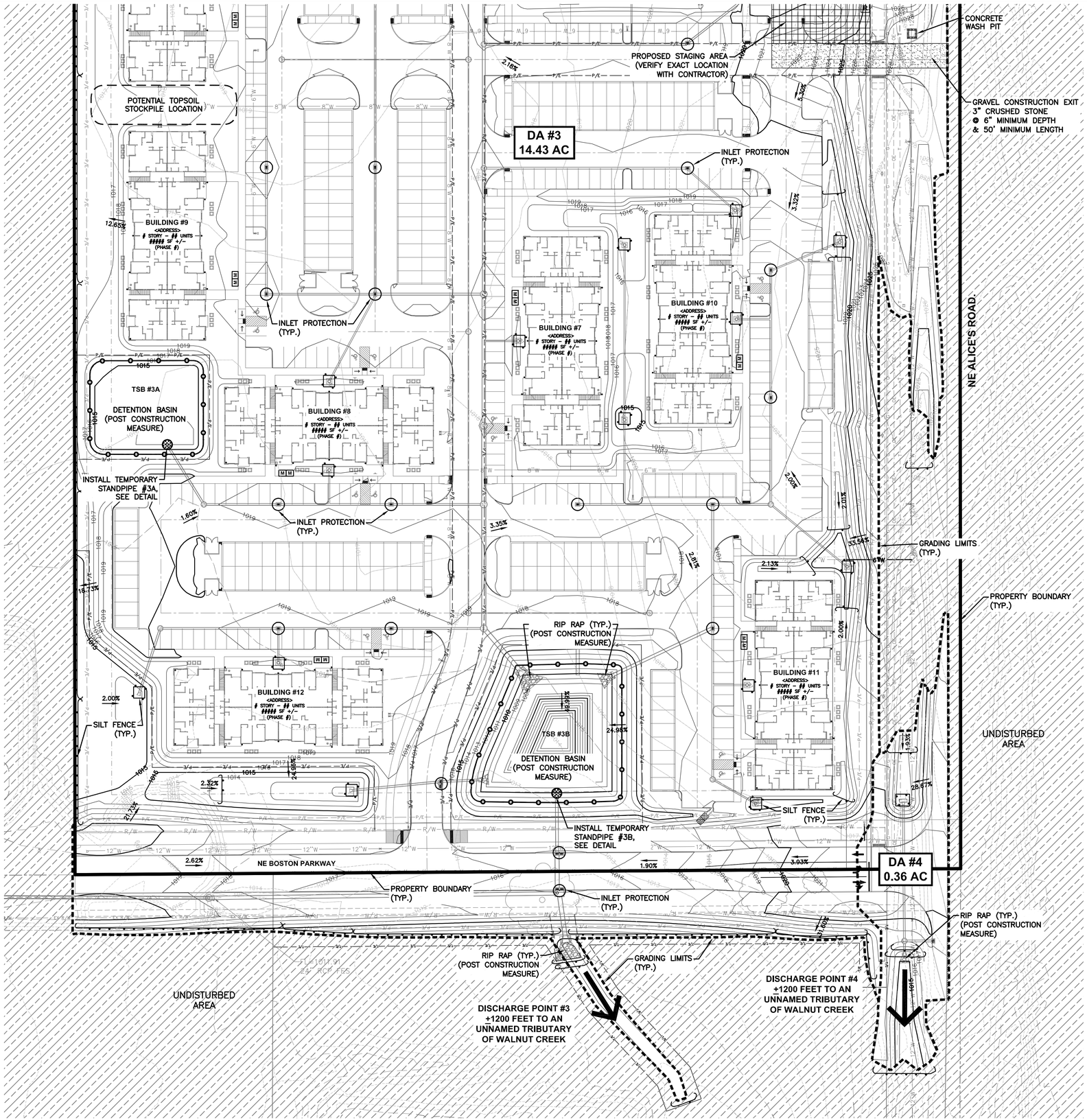
ENGINEER: EKO
EI: JMM
CIVIL DESIGN ADVANTAGE
WAUKEE, IOWA

ALICE PATRICIA HOMES

EROSION PLAN



STABILIZATION QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	SILT FENCE	LF	4,166
2	SEEDING, FERTILIZING, AND MULCHING	AC	15.54
3	INLET PROTECTION DEVICES	EA	37
4	CONCRETE WASHOUT PIT	EA	1
5	12" CMP/HDPE TEMPORARY STANDPIPE	EA	3
6	18" CMP/HDPE TEMPORARY STANDPIPE	EA	1

NOTES:

1. THE GENERAL PERMIT #2 HOLDER SHALL SUBMIT WRITTEN VERIFICATION THAT SECTION 2010 OF SUDAS IS BEING MET OR THAT A TOPSOIL PRESERVATION PLAN IS BEING MET. IF CONSTRUCTION IS PHASED, A LETTER SHALL BE SUBMITTED FOR EACH PHASE.
2. CONSTRUCTION OPERATIONS SHALL PROTECT STORM SEWERS AND DRAINAGE WAYS FROM ALLOWING SLURRY FROM CONCRETE OPERATIONS TO DISCHARGE OFFSITE.
3. WITH EACH PHASE OF DEVELOPMENT THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING EROSION CONTROLS THAT WILL DIRECT WATER INTO ONE OF THE FIVE TEMPORARY SEDIMENT BASINS BEING PROPOSED ON THE SITE. ALL TEMPORARY SWALES SHALL HAVE DITCH CHECKS INSTALLED.

SWPPP LEGEND

- DRAINAGE ARROW — X.XX %
- GRADING LIMITS
- SILT FENCE
- INLET PROTECTION
- PORTABLE RESTROOM — R
- CONCRETE WASHOUT PIT
- TEMPORARY STANDPIPE
- AREA TO BE SEEDED
- STRAW MAT
- UNDISTURBED AREA
- RIPRAP
- GRAVEL ENTRANCE
- STAGING AREA
- TEMPORARY SEDIMENT BASIN — TSB #

DISCHARGE POINT SUMMARY

DISCHARGE POINT #3 TO AN UNNAMED TRIBUTARY OF WALNUT CREEK ±1200 FT

TOTAL AREA DISTURBED TO DISCHARGE POINT	14.43 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	51,948 CU FT
VOLUME PROVIDED IN SILT FENCE (2,308 LF @ 4.5 CU FT/LF OF FENCE)	10,386 CU FT
VOLUME PROVIDED IN SILT FENCE WITHIN SWALES (275 LF @ 15 CU FT/LF)	4,125 CU FT
VOLUME PROVIDED IN TSB #3A	21,545 CU FT
VOLUME PROVIDED IN TSB #3B	48,507 CU FT
TOTAL VOLUME PROVIDED	84,563 CU FT

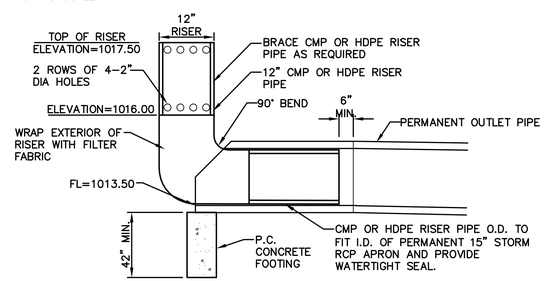
DISCHARGE POINT SUMMARY

DISCHARGE POINT #4 TO AN UNNAMED TRIBUTARY OF WALNUT CREEK ±1200 FT

TOTAL AREA DISTURBED TO DISCHARGE POINT	0.36 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	1,296 CU FT
VOLUME PROVIDED IN SILT FENCE WITHIN SWALES (114 LF @ 15 CU FT/LF)	1,710 CU FT
TOTAL VOLUME PROVIDED	1,710 CU FT

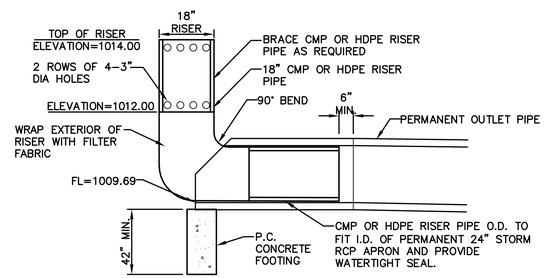
TEMPORARY STAND PIPE DETAIL #3A

NOT TO SCALE



TEMPORARY STAND PIPE DETAIL #3B

NOT TO SCALE



SCALE 0' 20' 40' 80'

REVISIONS	DATE
THIRD SUBMITTAL	04/21/16
SECOND SUBMITTAL	10/13/15
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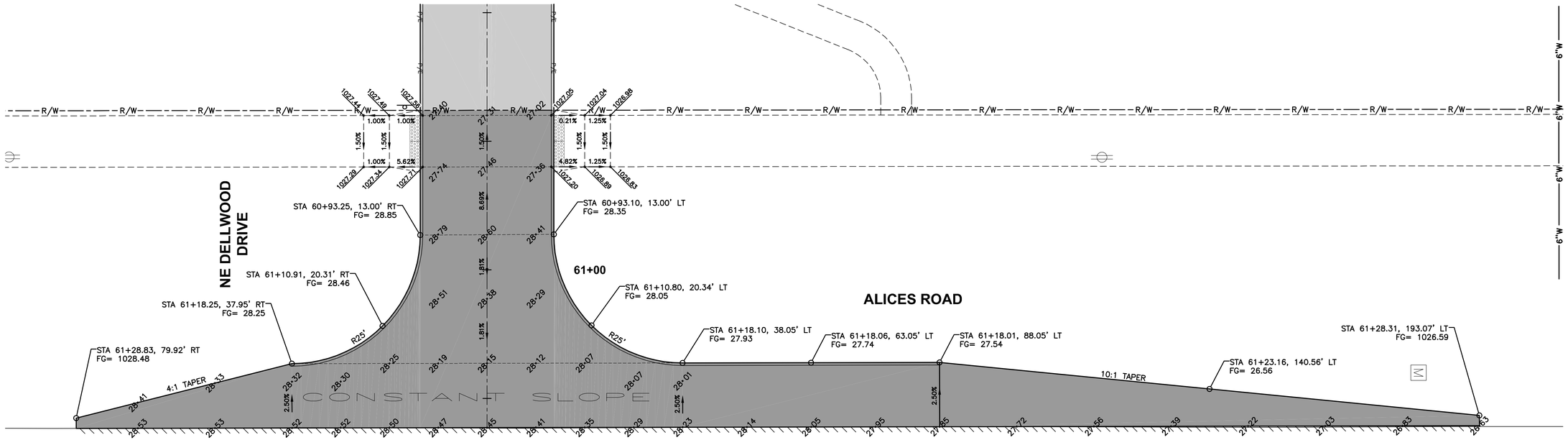
CIVIL DESIGN ADVANTAGE
WAUKEE, IOWA

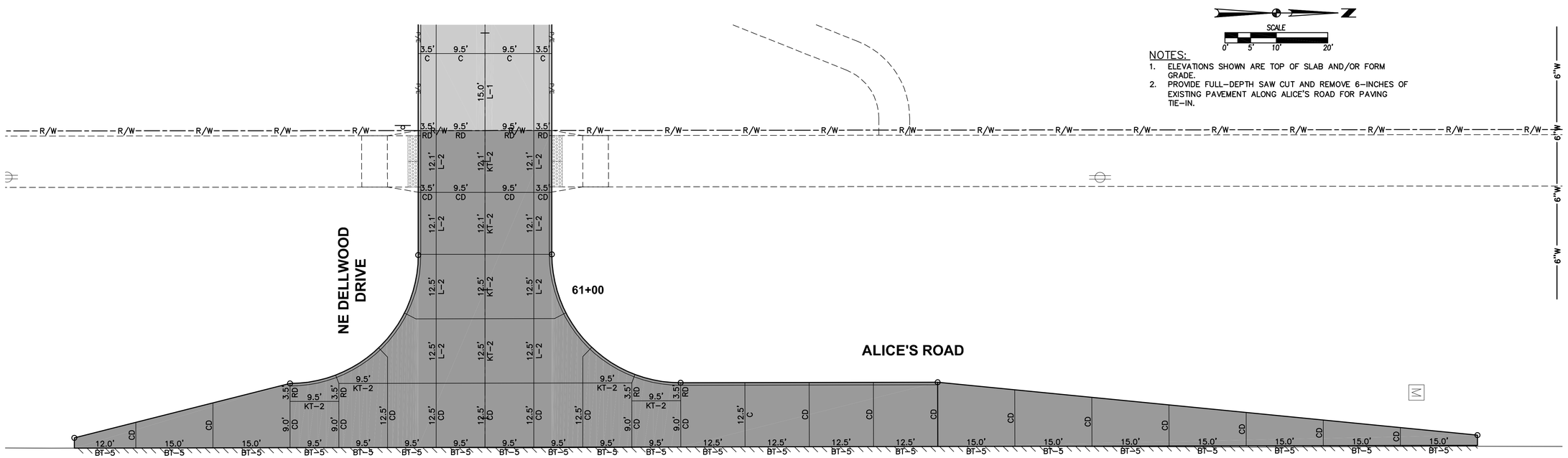
ALICE PATRICIA HOMES
EROSION PLAN

1411.577

FILE: H:\2014\1411577\DWG\1411577-SWPPP.DWG
FILE DATE: 3/31/16
PLOTTED BY: JARED MORRAY
DATE PLOTTED: 4/21/2016 11:37 AM
COMMENT: EKO2



GEOMETRICS AND STAKING LAYOUT



JOINTING LAYOUT

SCALE
0' 5' 10' 20'

NOTES:
1. ELEVATIONS SHOWN ARE TOP OF SLAB AND/OR FORM GRADE.
2. PROVIDE FULL-DEPTH SAW CUT AND REMOVE 6-INCHES OF EXISTING PAVEMENT ALONG ALICE'S ROAD FOR PAVING TIE-IN.

REVISIONS	DATE
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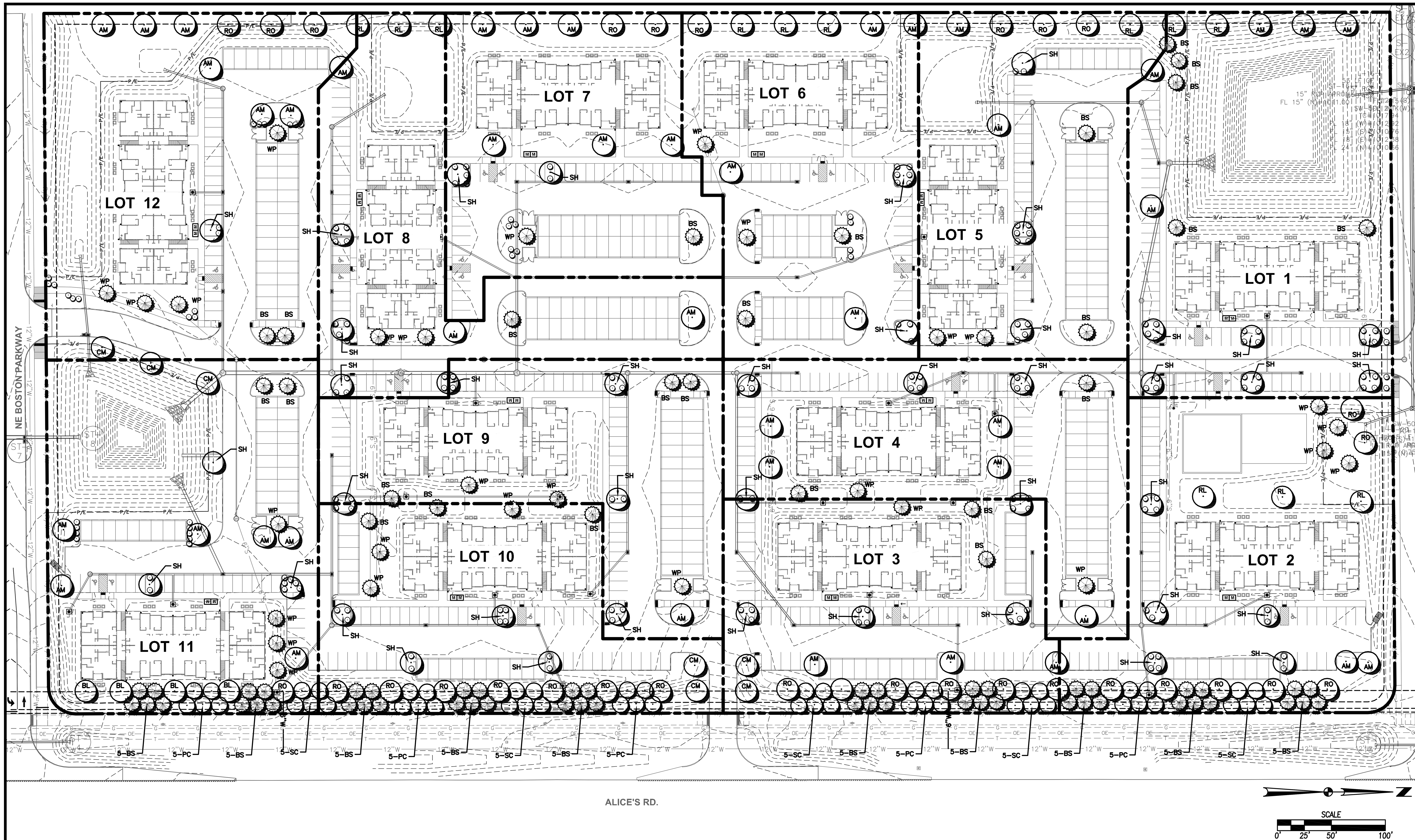
ALICE PATRICIA HOMES
INTERSECTION DETAILS

1411.577



LANDSCAPE NOTES

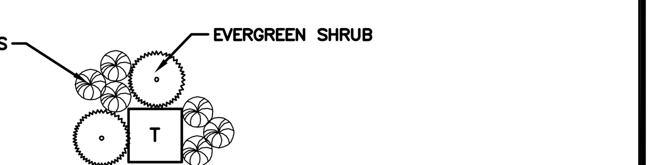
1. LOCATE ALL UTILITIES BEFORE ANY PLANTING BEGINS.
2. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS.
3. TYPE, SIZE, AND QUALITY OF PLANT MATERIAL SHALL CONFORM TO THE MOST CURRENT EDITION OF THE AMERICAN 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. BACKFILL TO TOP OF CURB. (MINUS 1 1/2" FOR SOD, IF REQ.)
6. WEED PREVENTER (PRE-EMERGENT) SHALL BE SPREAD OVER SOIL AFTER PLANTING AND BEFORE MULCHING IN ALL PLANTING BEDS PER MANUFACTURER'S RECOMMENDATIONS.
7. SHREDDED HARDWOOD MULCH SHALL BE PLACED AROUND ALL TREES, SHRUBS AND IN ALL PLANTING BEDS TO A (MIN) DEPTH OF 3".
8. ALL EDGING SHALL BE SPADE CUT EDGE.
9. PLANT QUANTITIES ARE SHOWN FOR INFORMATION ONLY, THE DRAWING SHALL PREVAIL IF ANY CONFLICTS ARISE.
10. ALL DEBRIS SPILLED IN THE PUBLIC R.O.W. SHALL BE PICKED UP BY THE CONTRACTOR AT THE END OF EACH WORK DAY. R.O.W. SHALL BE CLEAN AND FREE OF DEBRIS PRIOR TO ANY RAIN EVENT.
11. CONTRACTOR SHALL WARRANTY ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF INSTALLATION.
12. CONTRACTOR SHALL PROVIDE IRRIGATION DESIGN TO OWNER, IF REQUESTED, FOR APPROVAL.
13. THE PERMANENT OCCUPANCY OF EACH BUILDING WILL BE SUBJECT TO MEETING THE IDNR REQUIREMENTS FOR SITE ESTABLISHMENT.
14. SUBSTITUTIONS SHALL BE APPROVED BY THE CITY OF WAUKEE DEVELOPMENT SERVICES DEPARTMENT.

25' BUFFER REQUIREMENT (ALICE'S ROAD)

1 OVERSTORY TREE, 2 EVERGREEN TREES AND 2 ORNAMENTAL TREES PER 50 LF

1221 LF
OVERSTORY TREES REQUIRED =25
EVERGREEN TREES REQUIRED =49
ORNAMENTAL TREES REQUIRED =49

OVERSTORY TREES PROVIDED =25
EVERGREEN TREES PROVIDED =50
ORNAMENTAL TREES PROVIDED =50



ELECTRICAL TRANSFORMER SCREENING DETAIL

ALL GROUND MOUNTED MECHANICAL UNITS TO BE ADEQUATELY SCREENED FROM PUBLIC VIEW.

LOCATIONS AND QUANTITY OF ELECTRICAL UNITS SHALL BE DETERMINED BY UTILITY PROVIDER.

TURF GRASS

SOD OR HYDRO-MULCH ALL DISTURBED AREAS WITH THE EXCEPTION OF THE ALICE'S ROAD DITCH, NE DELLWOOD DRIVE ROW, NE BOSTON PARKWAY ROW, AND AREAS AROUND THE DETENTION PONDS WHICH SHALL BE HYDRO-MULCHED. TEMPORARY SEED SHALL BE PLACED IN AREAS WHERE FUTURE BUILDING CONSTRUCTION IS TO OCCUR.

PLANT SCHEDULE

CODE	QTY	OVERSTORY TREES		SIZE	COND
AM	43	AUTUMN BLAZE MAPLE	ACER RUBRUM 'AUTUMN BLAZE'	8' HT	B&B
CM	7	CRIMSON KING MAPLE	ACER PLATANOIDES	8' HT	B&B
SH	41	SHADEMASTER HONEYLOCUST	GLEDITSIA TRICANTHAS INERMIS 'SHADEMASTER'	8' HT	B&B
RO	30	RED OAK	QUERCUS RUBRA	8' HT	B&B
BL	4	BOULEVARD LINDEN	TILIA AMERICANA 'BOULEVARD'	8' HT	B&B
RL	12	REDMOND LINDEN	TILIA AMERICANA 'REDMOND'	8' HT	B&B

CODE	QTY	ORNAMENTAL TREES		SIZE	COND
PC	25	PRAIRIE FIRE CRAB	MALUS X 'PRAIRE FIRE'	6' HT.	B&B
SC	25	SPRING SNOW CRAB	MALUS X 'SPRING SNOW'	6' HT.	B&B

CODE	QTY	EVERGREEN TREES		SIZE	COND
WP	25	EASTERN WHITE PINE	PINUS STROBUS	6' HT.	B&B
BS	75	COLORADO BLUE SPRUCE	PICEA PUNGENS	6' HT.	B&B

CODE	QTY	SHRUBS		SIZE	COND
BB	181	DWARF BURNING BUSH	EUOUNYMOUS ALATAS COMPACTUS	18" HT.	CONT

LOT 1 - LANDSCAPE REQUIREMENTS

LOT AREA = 84,194 SF
OPEN SPACE REQUIRED (20%) = 17,039 SF
OPEN SPACE PROVIDED (60%) = 50,736 SF
IMPERVIOUS AREA = 33,458 SF

1 TREE PER 1,000 SF OR REQUIRED OPEN SPACE.
1 SHRUB PER 1,000 SF OR REQUIRED OPEN SPACE.

MINIMUM 50% = OVERSTORY
MINIMUM 25% = EVERGREEN

OVERSTORY TREES = 8' MIN. HEIGHT
EVERGREEN TREES = 6' MIN. HEIGHT
ORNAMENTAL TREES = 6' MIN. HEIGHT

TREES REQUIRED: 18
TREES PROVIDED: 18

SHRUBS REQUIRED: 18
SHRUBS PROVIDED: 27

LOT 2 - LANDSCAPE REQUIREMENTS

LOT AREA = 76,124 SF
OPEN SPACE REQUIRED (20%) = 15,225 SF
OPEN SPACE PROVIDED (49%) = 37,177 SF
IMPERVIOUS AREA = 38,947 SF

1 TREE PER 1,000 SF OR REQUIRED OPEN SPACE.
1 SHRUB PER 1,000 SF OR REQUIRED OPEN SPACE.

MINIMUM 50% = OVERSTORY
MINIMUM 25% = EVERGREEN

OVERSTORY TREES = 8' MIN. HEIGHT
EVERGREEN TREES = 6' MIN. HEIGHT
ORNAMENTAL TREES = 6' MIN. HEIGHT

TREES REQUIRED: 16
TREES PROVIDED: 16

SHRUBS REQUIRED: 16
SHRUBS PROVIDED: 16

LOT 3- LANDSCAPE REQUIREMENTS

LOT AREA = 60,133 SF
OPEN SPACE REQUIRED (20%) = 12,027 SF
OPEN SPACE PROVIDED (38%) = 23,100 SF
IMPERVIOUS AREA = 37,033 SF

1 TREE PER 1,000 SF OR REQUIRED OPEN SPACE.
1 SHRUB PER 1,000 SF OR REQUIRED OPEN SPACE.

MINIMUM 50% = OVERSTORY
MINIMUM 25% = EVERGREEN

OVERSTORY TREES = 8' MIN. HEIGHT
EVERGREEN TREES = 6' MIN. HEIGHT
ORNAMENTAL TREES = 6' MIN. HEIGHT

TREES REQUIRED: 13
TREES PROVIDED: 13

SHRUBS REQUIRED: 13
SHRUBS PROVIDED: 13

LOT 4 - LANDSCAPE REQUIREMENTS

LOT AREA = 58,358 SF
OPEN SPACE REQUIRED (20%) = 11,672 SF
OPEN SPACE PROVIDED (23%) = 13,565 SF
IMPERVIOUS AREA = 44,793 SF

1 TREE PER 1,000 SF OR REQUIRED OPEN SPACE.
1 SHRUB PER 1,000 SF OR REQUIRED OPEN SPACE.

MINIMUM 50% = OVERSTORY
MINIMUM 25% = EVERGREEN

OVERSTORY TREES = 8' MIN. HEIGHT
EVERGREEN TREES = 6' MIN. HEIGHT
ORNAMENTAL TREES = 6' MIN. HEIGHT

TREES REQUIRED: 12
TREES PROVIDED: 12

SHRUBS REQUIRED: 12
SHRUBS PROVIDED: 14

LOT 5 - LANDSCAPE REQUIREMENTS

LOT AREA = 64,277 SF
OPEN SPACE REQUIRED (20%) = 12,855 SF
OPEN SPACE PROVIDED (36%) = 23,352 SF
IMPERVIOUS AREA = 40,925 SF

1 TREE PER 1,000 SF OR REQUIRED OPEN SPACE.
1 SHRUB PER 1,000 SF OR REQUIRED OPEN SPACE.

MINIMUM 50% = OVERSTORY
MINIMUM 25% = EVERGREEN

OVERSTORY TREES = 8' MIN. HEIGHT
EVERGREEN TREES = 6' MIN. HEIGHT
ORNAMENTAL TREES = 6' MIN. HEIGHT

TREES REQUIRED: 13
TREES PROVIDED: 13

SHRUBS REQUIRED: 13
SHRUBS PROVIDED: 13

LOT 6 - LANDSCAPE REQUIREMENTS

LOT AREA = 63,977 SF
OPEN SPACE REQUIRED (20%) = 12,795 SF
OPEN SPACE PROVIDED (35%) = 22,653 SF
IMPERVIOUS AREA = 41,324 SF

1 TREE PER 1,000 SF OR REQUIRED OPEN SPACE.
1 SHRUB PER 1,000 SF OR REQUIRED OPEN SPACE.

MINIMUM 50% = OVERSTORY
MINIMUM 25% = EVERGREEN

OVERSTORY TREES = 8' MIN. HEIGHT
EVERGREEN TREES = 6' MIN. HEIGHT
ORNAMENTAL TREES = 6' MIN. HEIGHT

TREES REQUIRED: 13
TREES PROVIDED: 14

SHRUBS REQUIRED: 13
SHRUBS PROVIDED: 13

LOT 7 - LANDSCAPE REQUIREMENTS

LOT AREA = 58,638 SF
OPEN SPACE REQUIRED (20%) = 11,728 SF
OPEN SPACE PROVIDED (36%) = 21,340 SF
IMPERVIOUS AREA = 37,298 SF

1 TREE PER 1,000 SF OR REQUIRED OPEN SPACE.
1 SHRUB PER 1,000 SF OR REQUIRED OPEN SPACE.

MINIMUM 50% = OVERSTORY
MINIMUM 25% = EVERGREEN

OVERSTORY TREES = 8' MIN. HEIGHT
EVERGREEN TREES = 6' MIN. HEIGHT
ORNAMENTAL TREES = 6' MIN. HEIGHT

TREES REQUIRED: 12
TREES PROVIDED: 12

SHRUBS REQUIRED: 12
SHRUBS PROVIDED: 13

LOT 8 - LANDSCAPE REQUIREMENTS

LOT AREA = 58,391 SF
OPEN SPACE REQUIRED (20%) = 11,678 SF
OPEN SPACE PROVIDED (31%) = 18,391 SF
IMPERVIOUS AREA = 40,000 SF

1 TREE PER 1,000 SF OR REQUIRED OPEN SPACE.
1 SHRUB PER 1,000 SF OR REQUIRED OPEN SPACE.

MINIMUM 50% = OVERSTORY
MINIMUM 25% = EVERGREEN

OVERSTORY TREES = 8' MIN. HEIGHT
EVERGREEN TREES = 6' MIN. HEIGHT
ORNAMENTAL TREES = 6' MIN. HEIGHT

TREES REQUIRED: 12
TREES PROVIDED: 12

SHRUBS REQUIRED: 12
SHRUBS PROVIDED: 13

LOT 9 - LANDSCAPE REQUIREMENTS

LOT AREA = 59,785 SF
OPEN SPACE REQUIRED (20%) = 11,957 SF
OPEN SPACE PROVIDED (24%) = 14,399 SF
IMPERVIOUS AREA = 45,386 SF

1 TREE PER 1,000 SF OR REQUIRED OPEN SPACE.
1 SHRUB PER 1,000 SF OR REQUIRED OPEN SPACE.

MINIMUM 50% = OVERSTORY
MINIMUM 25% = EVERGREEN

OVERSTORY TREES = 8' MIN. HEIGHT
EVERGREEN TREES = 6' MIN. HEIGHT
ORNAMENTAL TREES = 6' MIN. HEIGHT

TREES REQUIRED: 12
TREES PROVIDED: 12

SHRUBS REQUIRED: 12
SHRUBS PROVIDED: 12

LOT 10 - LANDSCAPE REQUIREMENTS

LOT AREA = 58,903 SF
OPEN SPACE REQUIRED (20%) = 11,781 SF
OPEN SPACE PROVIDED (40%) = 23,833 SF
IMPERVIOUS AREA = 35,070 SF

1 TREE PER 1,000 SF OR REQUIRED OPEN SPACE.
1 SHRUB PER 1,000 SF OR REQUIRED OPEN SPACE.

MINIMUM 50% = OVERSTORY
MINIMUM 25% = EVERGREEN

OVERSTORY TREES = 8' MIN. HEIGHT
EVERGREEN TREES = 6' MIN. HEIGHT
ORNAMENTAL TREES = 6' MIN. HEIGHT

TREES REQUIRED: 12
TREES PROVIDED: 12

SHRUBS REQUIRED: 12
SHRUBS PROVIDED: 13

LOT 11 - LANDSCAPE REQUIREMENTS

LOT AREA = 82,168 SF
OPEN SPACE REQUIRED (20%) = 16,434 SF
OPEN SPACE PROVIDED (52%) = 42,497 SF
IMPERVIOUS AREA = 39,671 SF

1 TREE PER 1,000 SF OR REQUIRED OPEN SPACE.
1 SHRUB PER 1,000 SF OR REQUIRED OPEN SPACE.

MINIMUM 50% = OVERSTORY
MINIMUM 25% = EVERGREEN

OVERSTORY TREES = 8' MIN. HEIGHT
EVERGREEN TREES = 6' MIN. HEIGHT
ORNAMENTAL TREES = 6' MIN. HEIGHT

TREES REQUIRED: 17
TREES PROVIDED: 17

SHRUBS REQUIRED: 17
SHRUBS PROVIDED: 17

LOT 12 - LANDSCAPE REQUIREMENTS

LOT AREA = 83,089 SF
OPEN SPACE REQUIRED (20%) = 16,618 SF
OPEN SPACE PROVIDED (46%) = 38,475 SF
IMPERVIOUS AREA = 44,614 SF

1 TREE PER 1,000 SF OR REQUIRED OPEN SPACE.
1 SHRUB PER 1,000 SF OR REQUIRED OPEN SPACE.

MINIMUM 50% = OVERSTORY
MINIMUM 25% = EVERGREEN

OVERSTORY TREES = 8' MIN. HEIGHT
EVERGREEN TREES = 6' MIN. HEIGHT
ORNAMENTAL TREES = 6' MIN. HEIGHT

TREES REQUIRED: 17
TREES PROVIDED: 17

SHRUBS REQUIRED: 17
SHRUBS PROVIDED: 17

FILE: H:\2014\1411577\DWG\1411577-LANDSCAPE.DWG
FILE DATE: 1/21/16 DATE PLOTTED: 4/21/2016 9:31 AM
PLOTTED BY: JARED MURRAY TECH: COMMENT: ENG:

DATE	REVISIONS
04/21/16	THIRD SUBMITTAL
10/13/15	SECOND SUBMITTAL
08/18/15	FIRST SUBMITTAL

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