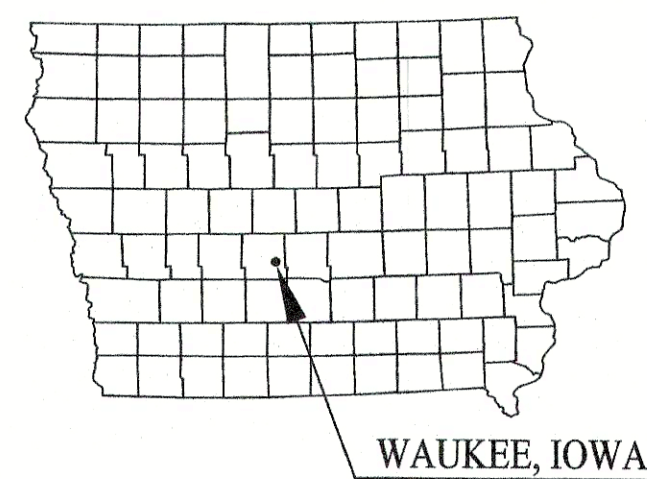


# LEGACY POINTE AT WAUKEE PLAT 8 WAUKEE, IOWA 2017

## WATER, SANITARY SEWER, STORM SEWER, GRADING AND PAVING IMPROVEMENTS



Materials and construction shall be in accordance with the Standard Specifications for Public Improvements, Waukee, Iowa, plus current addenda and SUDAS Standard Specifications, 2017 Edition, plus current Supplemental Specification and Special Provisions.

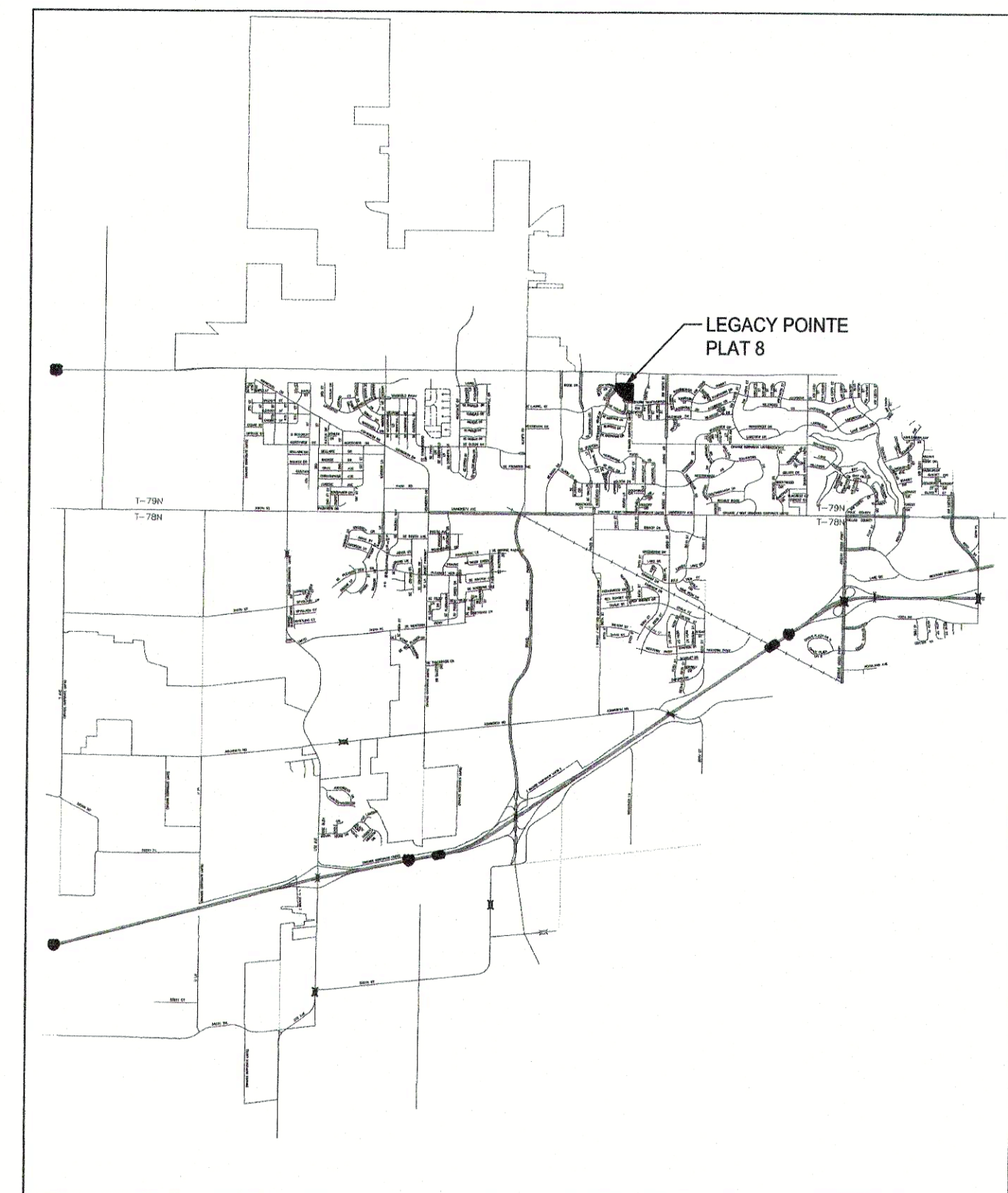
I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

*Erin Van Roekel* 10-13-17  
Erin K. Van Roekel, P.E. Date  
License number: 22150  
My license renewal date is December 31, 2017  
Pages or sheets covered by this seal: ALL

**UTILITY NOTE:**  
UTILITIES SHOWN HEREIN ARE AN APPROXIMATE LOCATION BASED ON AN IOWA ONE CALL DESIGN LOCATE AND MAPS. ADDITIONAL UTILITIES MAY EXIST THAT ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE USER TO VERIFY ALL UTILITIES BEFORE DIGGING OR CONSTRUCTION.

**RECORD DRAWINGS**

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SHEET NO.	DESCRIPTION
A.01	TITLE SHEET
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C.01	PROJECT QUANTITIES
D.01	GRADING AND STORMWATER POLLUTION PREVENTION PLAN
D.02-D.03	PLAN AND PROFILE SHEETS
L.01	CUL-DE-SAC DETAIL
M.01	STORM SEWER PLAN AND PROFILE
SW.01-SW.02	SANITARY SEWER AND WATER MAIN PLAN AND PROFILE
W.01	CROSS SECTIONS
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
LIGHTING	LIGHTING PLAN
15	TOTAL SHEETS



VICINITY MAP

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LEGACY POINTE AT WAUKEE  
PLAT 8  
WAUKEE, IOWA  
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SHEET TITLE  
TITLE SHEET

SCALE:  
NO SCALE

FIELD BOOK:  
54-B

DRAWN BY:  
TRH

APPROVED:  
EVR

REVISIONS:  
9-28-2017-removed installed by other note on subdrain and cleanouts

DATE:  
SEPT. 12, 2017

PROJECT NO.:  
7016107

SHEET NO.:  
A.01

GENERAL SYMBOLS LEGEND			
●	= PROPERTY CORNER FOUND	—	= SIGN
▲	= SECTION CORNER FOUND	⊗	= BOLLARD
—000—	= EXISTING GROUND CONTOUR LINE	⊗	= RAILROAD GATE OR SIGNAL
—W—	= EXISTING WATER LINE (SIZE VARIES)	□MB	= MAILBOX
⊗	= EXISTING FIRE HYDRANT	—	= FLAGPOLE
⊗	= EXISTING WATER VALVE	□DS	= DOWNSPOUT
⊗	= EXISTING WATER SERVICE SHUTOFF	⊗	= TREE OR SHRUB
⊗	= EXISTING WATER METER PIT	⊗	= STUMP
⊗	= EXISTING WATER WELL	—x—	= FIELD FENCELINE
□WM	= WATER METER	—o—	= CHAIN LINK FENCELINE
—ST—	= EXISTING STORM SEWER LINE (SIZE VARIES)	—+—	= WOOD FENCELINE
⊗	= EXISTING STORM SEWER ACCESS	—	= SILT FENCE
⊗	= EXISTING SEPTIC TANK	⊗	= BENCHMARK OR ELEVATION MARKER
⊗	= EXISTING SANITARY SEWER ACCESS	○	= PROPERTY CORNER SET
—SS—	= EXISTING SANITARY SEWER MAIN (SIZE VARIES)	△	= SECTION CORNER SET
⊗	= CLEANOUT	—	= PROPOSED WATER MAIN (SIZE VARIES)
⊗	= ELECTRIC MANHOLE	⊗	= PROPOSED FIRE HYDRANT
—OE—	= OVERHEAD ELECTRIC LINE	⊗	= PROPOSED WATER VALVE
—UE—	= UNDERGROUND ELECTRIC LINE	⊗	= PROPOSED WATER SHUTOFF
□EM	= ELECTRIC METER	⊗	= PROPOSED SANITARY SEWER MANHOLE
—FO—	= FIBEROPTIC LINE	⊗	= PROPOSED SANITARY SEWER END LINE CLEANOUT
⊗	= TELEPHONE MANHOLE	⊗	= PROPOSED SANITARY SEWER DOUBLE CLEANOUT
TELE PED	= TELEPHONE PEDESTAL	—	= PROPOSED SANITARY SEWER MAIN (SIZE VARIES)
—UT—	= TELEPHONE LINE	⊗	= PROPOSED LIFT STATION
□TV PED	= TELEVISION PEDESTAL	—FM—	= PROPOSED SANITARY SEWER FORCE MAIN
—TV—	= TELEVISION LINE	⊗	= PROPOSED STORM SEWER ACCESS
□GM	= GAS METER	—	= PROPOSED STORM SEWER MAIN
⊗	= GAS VALVE	—SST—	= PROPOSED SECONDARY STORM SEWER
—G—	= EXISTING GAS LINE	—000—	= PROPOSED GROUND CONTOUR LINE
⊗	= UTILITY POLE	▨	= SURFACING REMOVAL
●	= GUY WIRE	□OR	= CONCRETE SURFACING REPLACEMENT
☆	= LUMINAIRE	→	= FLOW DIRECTION ARROW
□	= TRANSFORMER	1000.00 ●	= FINISH GRADE ELEVATION MARKER

GENERAL ABBREVIATIONS LEGEND			
R/W	= RIGHT OF WAY	SY	= SQUARE YARD
R.O.W.	= RIGHT OF WAY	CY	= CUBIC YARD
P.C.	= POINT OF CURVATURE	MJ	= MECHANICAL JOINT
P.I.	= POINT OF INTERSECTION	PE	= PLAIN END JOINT
P.T.	= POINT OF TANGENCY	FE	= FLANGED JOINT
℄	= CENTERLINE	UT	= UNION TITE JOINT
TC	= TOP OF CURB	S.S.	= STAINLESS STEEL
GU	= GUTTER	O.C.	= ON CENTER
FL	= FLOW LINE	I.D.	= INSIDE DIAMETER
SB	= SOIL BORING	O.D.	= OUTSIDE DIAMETER
R	= RADIUS	∅	= DIAMETER
BTM	= BOTTOM	DIA.	= DIAMETER
HWL	= HIGH WATER LEVEL	#	= NUMBER
LWL	= LOW WATER LEVEL	TYP	= TYPICAL
EA	= EACH	INV	= INVERT
GPM	= GALLONS PER MINUTE	PVC	= POLYVINYL CHLORIDE PIPE
IN.	= INCHES	DIP	= DUCTILE IRON PIPE
FT	= FOOT OR FEET	CIP	= CAST IRON PIPE
SF	= SQUARE FEET	CMP	= CORRUGATED METAL PIPE
LF	= LINEAR FOOT	RCP	= REINFORCED CONCRETE PIPE

- ### GENERAL CONSTRUCTION NOTES
- COOPERATE AND COORDINATE CONSTRUCTION ACTIVITIES WITH OTHER CONTRACTORS, OWNER'S PERSONNEL, CITY OF WAUKEE ENGINEERING DEPARTMENT AND ENGINEER.
  - NOTIFY PROPERTY OWNERS 24 HOURS IN ADVANCE IF ACCESS TO PROPERTY WILL BE INTERRUPTED.
  - PROVIDE ACCESS TO PRIVATE PROPERTY FOR EMERGENCY VEHICLES AT ALL TIMES.
  - ANY CHANGES PROPOSED TO THE PLAN SET DURING CONSTRUCTION SHALL RECEIVE WRITTEN APPROVAL FROM THE CITY OF WAUKEE ENGINEERING DEPARTMENT. THE CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES MADE DURING CONSTRUCTION THAT HAVE NOT RECEIVED WRITTEN PERMISSION FROM CITY OF WAUKEE ENGINEERING DEPARTMENT.
  - KEEP CONSTRUCTION OPERATIONS WITHIN RIGHTS-OF-WAY AND EASEMENTS PROVIDED.
  - REMOVE DEBRIS SPILLED INTO THE RIGHTS-OF-WAY AT THE END OF EACH WORK DAY AND PRIOR TO A RAIN EVENT.
  - PROVIDE BARRICADES, LIGHTS AND/OR WATCHMAN FOR WARNING OF VEHICLES AND/OR PEDESTRIANS. LEAVE NO EXCAVATION OPEN OVER NIGHT OR OVER WEEKENDS OR OTHER NON-WORKING PERIODS.
  - STORE EQUIPMENT WITHIN THE OWNER'S PROPERTY OR EASEMENTS PROVIDED. CONTRACTOR RESPONSIBLE FOR LOCATING ADDITIONAL STORAGE AREAS IF NEEDED.
  - CONTRACTOR RESPONSIBLE FOR REMOVING AND REPLACING ALL SIGN POSTS AND MAIL BOXES IN LINE OF CONSTRUCTION. WORK IS INCIDENTAL TO CONSTRUCTION.
  - UNLESS OTHERWISE SPECIFIED OR DIRECTED BY OWNER, ALL SALVAGED EQUIPMENT, PIPING AND MATERIALS SHALL REMAIN PROPERTY OF OWNER. STORE SALVAGE ON SITE AS DIRECTED BY OWNER. CONTRACTOR SHALL DISPOSE OF ALL WASTE EQUIPMENT AND MATERIALS AS SPECIFIED; CONTRACTOR SHALL DETERMINE FROM OWNER THE ITEMS TO BE SALVAGED PRIOR TO COMMENCING THE WORK.
  - CONTRACTOR RESPONSIBLE FOR MAKING ARRANGEMENTS FOR AND PAYING FOR UTILITIES USED DURING CONSTRUCTION.
  - CONTRACTOR SHALL PROVIDE SANITARY FACILITIES FOR CONSTRUCTION WORKERS.
  - CONTRACTOR SHALL PRESERVE ALL MONUMENTS, STAKES, REFERENCE POINTS AND BENCH MARKS. IN CASE OF DESTRUCTION BY CONTRACTOR, ALL COSTS FOR REPLACEMENT AND RESPONSIBILITY FOR MISTAKES OR LOSS OF TIME CAUSED THEREBY IS THE CONTRACTOR'S.
  - CONTRACT COMPLETION TIME: SPECIFIED CONTRACT COMPLETION TIME IS ESTABLISHED TO ACCOUNT FOR AVERAGE WEATHER CONDITIONS, NORMAL NON-WORK PERIODS, SUCH AS WEEKENDS, HOLIDAYS AND WINTER CONDITIONS AND OTHER FACTORS PREVAILING IN THE LOCALITY OF WORK. CONTRACTOR SHALL SCHEDULE WORK AS REQUIRED TO FULLY COMPLETE WORK WITHIN CONTRACT COMPLETION TIME.
  - CLEAR ALL TREES AND SHRUBS WITHIN THE LIMITS OF THE PROPOSED AND EXISTING RIGHT-OF-WAYS. WORK IS INCIDENTAL TO CONSTRUCTION.
  - PROTECT ALL UTILITIES FROM DAMAGE DURING CONSTRUCTION UNLESS NOTED OTHERWISE ON PLANS. LOCATION OF EXISTING UTILITIES SHOWN ON PLANS ARE APPROXIMATE. VERIFY LOCATION OF EXISTING UTILITIES IN LINE OF CONSTRUCTION PRIOR TO BEGINNING CONSTRUCTION BY EXCAVATING AHEAD OF THE WORK. CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF CONSTRUCTION OPERATION THROUGH IOWA ONE CALL 1-800-292-8989 OR AS DIRECTED BY EACH UTILITY COMPANY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY LINES ON PRIVATE AND PUBLIC RIGHT OF WAY.
  - REPAIR OR REPLACE ALL CUT OR OTHERWISE DAMAGED SUBSURFACE DRAINAGE TILES, CULVERTS, OR PIPES. ALL FIELD TILES ENCOUNTED SHALL BE REPAIRED AND CONNECTED TO STORM SEWERS WHERE POSSIBLE AND LOCATION OF CONNECTION SHALL BE PROVIDED TO THE ENGINEER FOR NOTATION ON AS-BUILTS.
  - REMOVE EXISTING SURFACING IN NEAT UNIFORM LINES PARALLEL TO TRENCH CONSTRUCTION. REPLACE SURFACING IN KIND UNLESS SHOWN OTHERWISE ON PLANS OR SPECIFIED.
  - TOPSOIL PRESERVATION SHALL BE IN ACCORDANCE WITH SUDAS SECTION 2010.
  - UNLESS SHOWN OTHERWISE, PROTECT EXISTING STREET SURFACING FROM DAMAGE DUE TO CONSTRUCTION ACTIVITIES. REPLACE ALL DAMAGED SURFACES IN KIND AT NO ADDITIONAL COST TO OWNER.
  - ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE FERTILIZED, SEEDED AND MULCHED AS SPECIFIED. ALL EXISTING YARDS ARE TO BE SODDED AND WATERED UNTIL ESTABLISHED.
  - DISPOSE OF MATERIALS NOT SUITABLE FOR TRENCH BACKFILL AND SURFACE RESTORATION AND EXCESS EXCAVATED MATERIAL DISPOSAL IS INCIDENTAL TO CONSTRUCTION.
  - PERFORM SPECIFIED SANITARY SEWER AND MANHOLE TESTING, AND MAKE ANY REPAIRS REQUIRED PRIOR TO CONNECTION TO EXISTING SANITARY SEWER SYSTEM.
  - ALL UTILITIES ARE TO BE TESTED TO CITY STANDARDS AND THE CITY OF WAUKEE ENGINEERING DEPARTMENT SHALL WITNESS ALL TESTING.
  - CONTRACTOR SHALL PREVENT ENTRY OF MUD, DEBRIS AND OTHER MATERIAL INTO NEW SEWER CONSTRUCTION OR EXISTING SEWERS. CONTRACTOR SHALL CLEAN AT NO COST TO OWNER.
  - ALL SANITARY AND STORM SEWER PIPES SHALL BE CLEANED AND TELEVISED PRIOR TO PAVING. THE CITY OF WAUKEE ENGINEERING DEPARTMENT SHALL WITNESS ALL CLEANING AND TELEVISIONING. A HARD COPY OF THE REPORT AND VIDEO SHALL BE PROVIDED TO THE CITY OF WAUKEE.
  - ELEVATIONS SHOWN FOR MANHOLE TOPS ARE APPROXIMATE. MAKE FINAL ADJUSTMENTS IN FIELD AS DIRECTED BY ENGINEER.
  - KEEP EXISTING SEWER AND WATER SYSTEMS IN CONTINUOUS OPERATION. PROVIDE TEMPORARY CONNECTIONS AND PIPING AS REQUIRED. NO BYPASSING OF RAW OR PARTIALLY TREATED WASTEWATER PERMITTED. COSTS FOR PROVIDING ANY TEMPORARY CONNECTIONS IS INCIDENTAL TO CONSTRUCTION.
  - INSTALL "FLARED END SECTION APRON GUARDS" ON ALL CONCRETE PIPE APRONS.
  - ALL TRENCH BACKFILL FOR SANITARY SEWER, WATER MAIN AND STORM SEWER TO BE "COMPACTED" PER SPECIFICATIONS.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF REMOVED CONCRETE AND ASPHALT PAVEMENTS AND SIDEWALKS.
  - CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH IDOT SPECIFICATIONS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
  - CONTRACTOR SHALL PROVIDE 12' WIDE BY 100' LONG ENTRANCE ROAD SURFACED WITH 2 1/2" STONE TO PREVENT TRACKING OF MUD ONTO CONCRETE PAVEMENT.
  - CONTRACTOR SHALL COORDINATE ALL TIE-INS TO EXISTING UTILITIES WITH THE CITY OF WAUKEE PUBLIC WORKS DEPARTMENT.
  - CONNECTIONS TO EXISTING SANITARY MANHOLES ARE TO BE CORE DRILLED AND USE A LINK SEAL.
  - THE CONTRACTOR IS TO SET UP A PRE-CONSTRUCTION MEETING WITH THE CITY OF WAUKEE PUBLIC WORKS ONE WEEK PRIOR TO CONSTRUCTION.
  - CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUBMITTALS OF CONSTRUCTION MATERIALS PRIOR TO CONSTRUCTION.
  - THE CONTRACTOR SHALL NOTIFY THE CITY OF WAUKEE ENGINEERING DEPARTMENT 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION AND PRIOR TO ANY WEEKEND OR HOLIDAY WORK.
  - ALL FIRE HYDRANTS ARE TO HAVE STORZ FITTINGS.
  - CONSTRUCTION STAKING, INCLUDING ALL PEDESTRIAN FACILITIES, ARE TO BE DONE BY A LICENSED SURVEYOR OR ENGINEER.
  - A GEOTECHNICAL REPORT WILL BE PROVIDED TO THE CITY AND PLAN SET IS SUBJECT TO ANY CHANGES REQUIRED BY THE GEOTECHNICAL REPORT.

**GARDEN & ASSOCIATES, LTD.**  
**ENGINEERS & SURVEYORS**  
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LEGACY POINTE AT WAUKEE  
 PLAT 8  
 WAUKEE, IOWA  
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SHEET TITLE  
 LEGEND, LOCATION  
 MAP AND GENERAL  
 NOTES

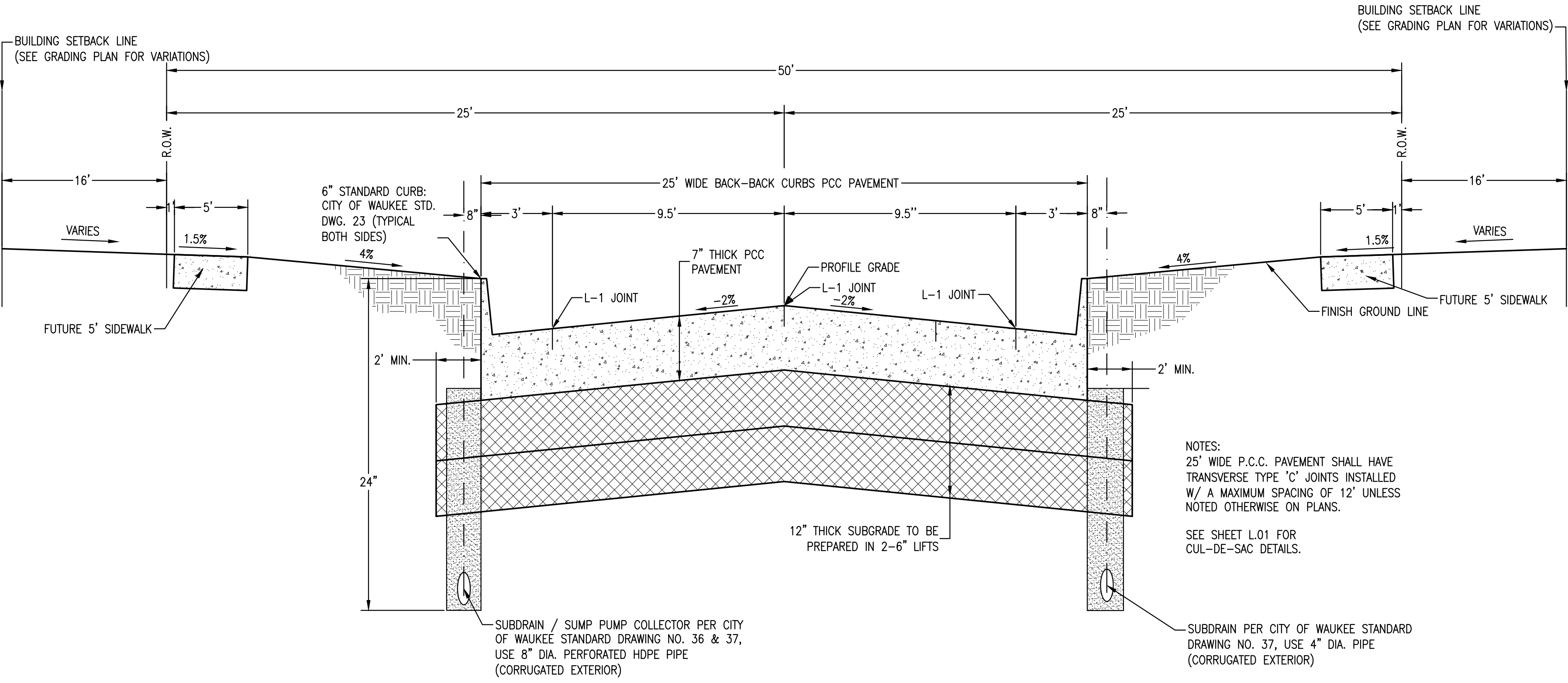
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FIELD BOOK:	54-B
DRAWN BY:	TRH
APPROVED:	EVF

REVISIONS:  
 8-9-18 RECORD DRAWINGS

DATE:  
 SEPT. 12, 2017

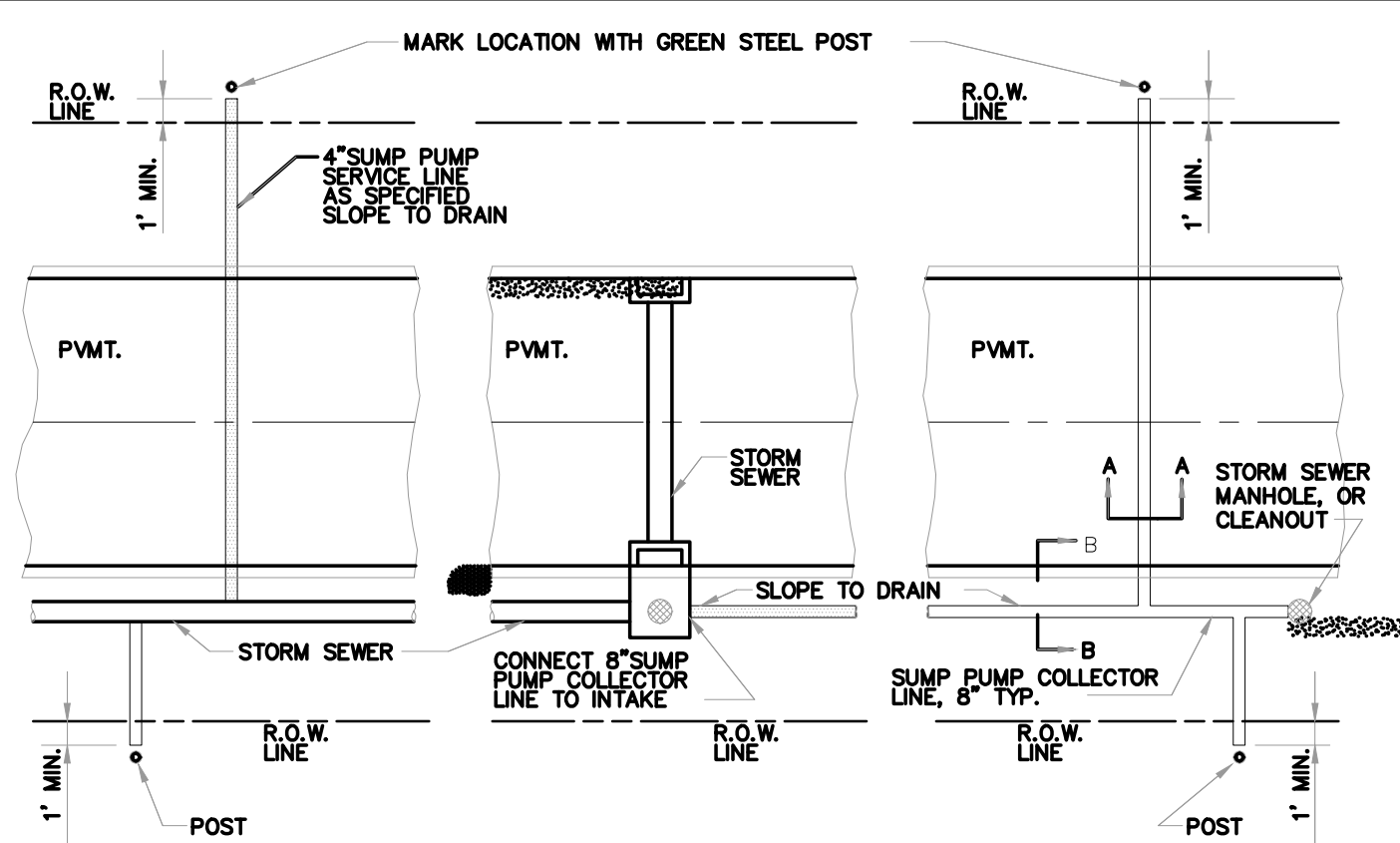
PROJECT NO.:  
 7016107

SHEET NO.:  
 A.02

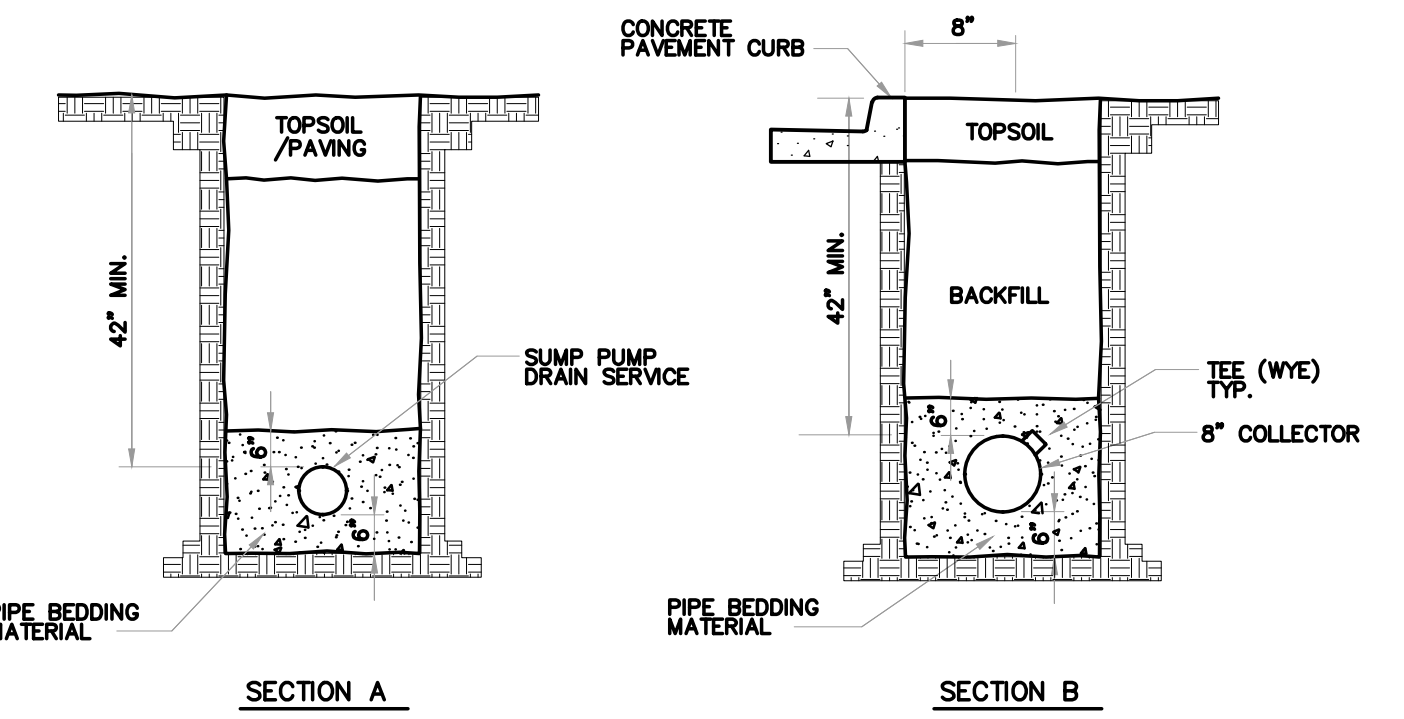


NOTES:  
 25' WIDE P.C.C. PAVEMENT SHALL HAVE TRANSVERSE TYPE 'C' JOINTS INSTALLED W/ A MAXIMUM SPACING OF 12' UNLESS NOTED OTHERWISE ON PLANS.  
 SEE SHEET L.01 FOR CUL-DE-SAC DETAILS.

TYPICAL 25' WIDE PAVEMENT SECTION  
 SE SILVER POINTE DRIVE  
 NO SCALE

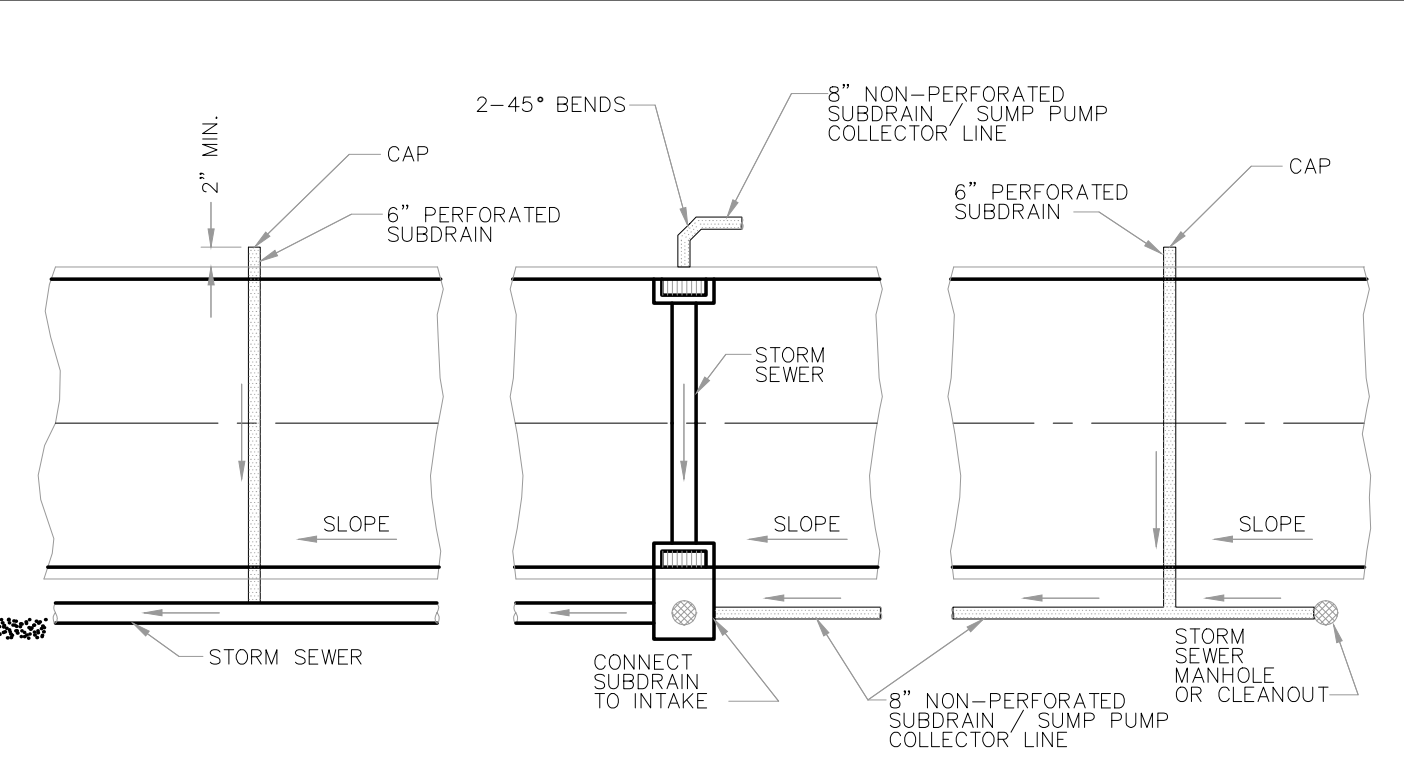


NOTE  
 CORE DRILL ALL STORM SEWER AND PLACE NON-SHRINK GROUT COLLAR AT CONNECTION.

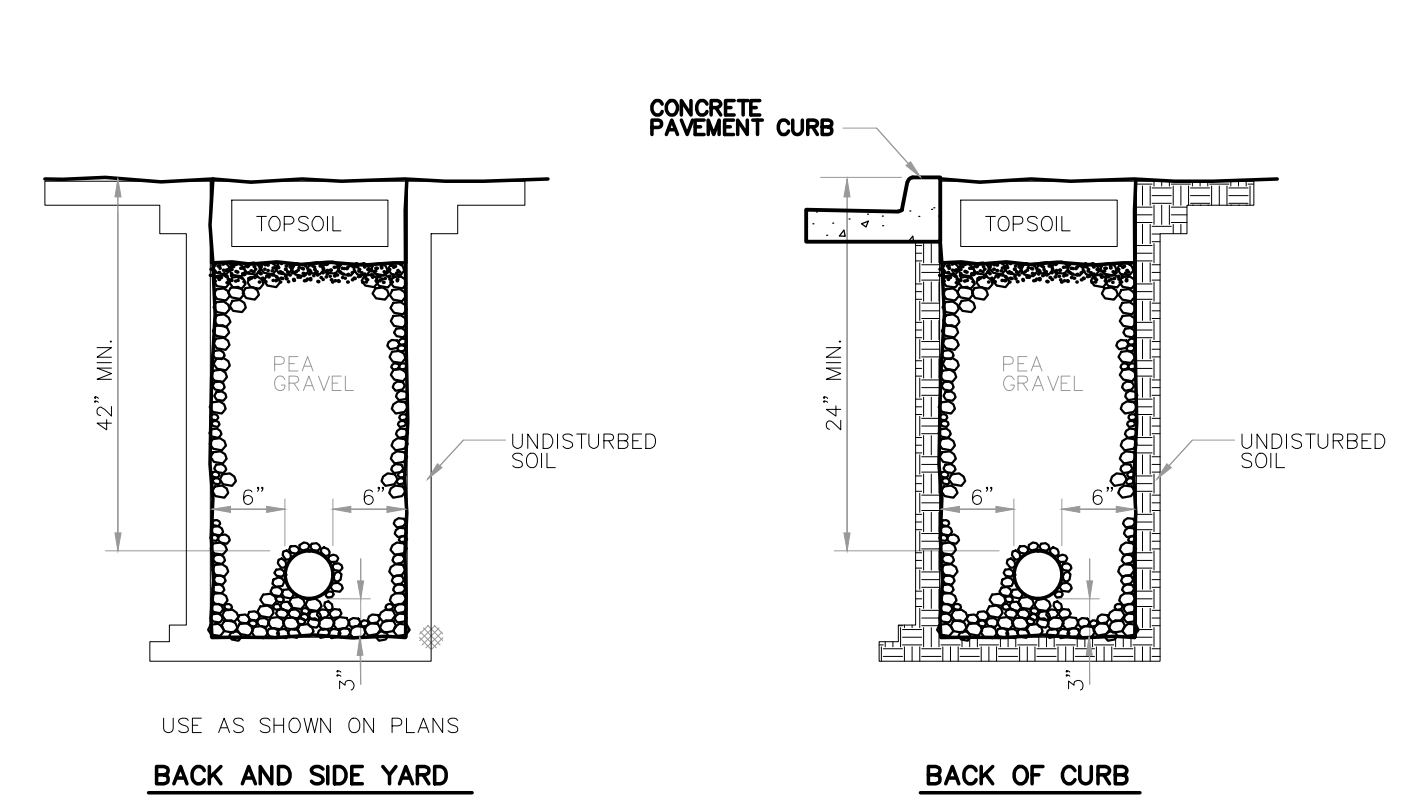


NOTES  
 1. ALL CONNECTIONS MADE OF DISIMILAR PIPE- USE APPROVED RUBBER GASKETED FITTINGS.  
 2. CAP ALL SERVICE LINES.  
 3. PROVIDE TRACER WIRE.

CITY OF WAUKEE  
 SUMP PUMP DRAIN LINES  
 STD.DWG.NO.36

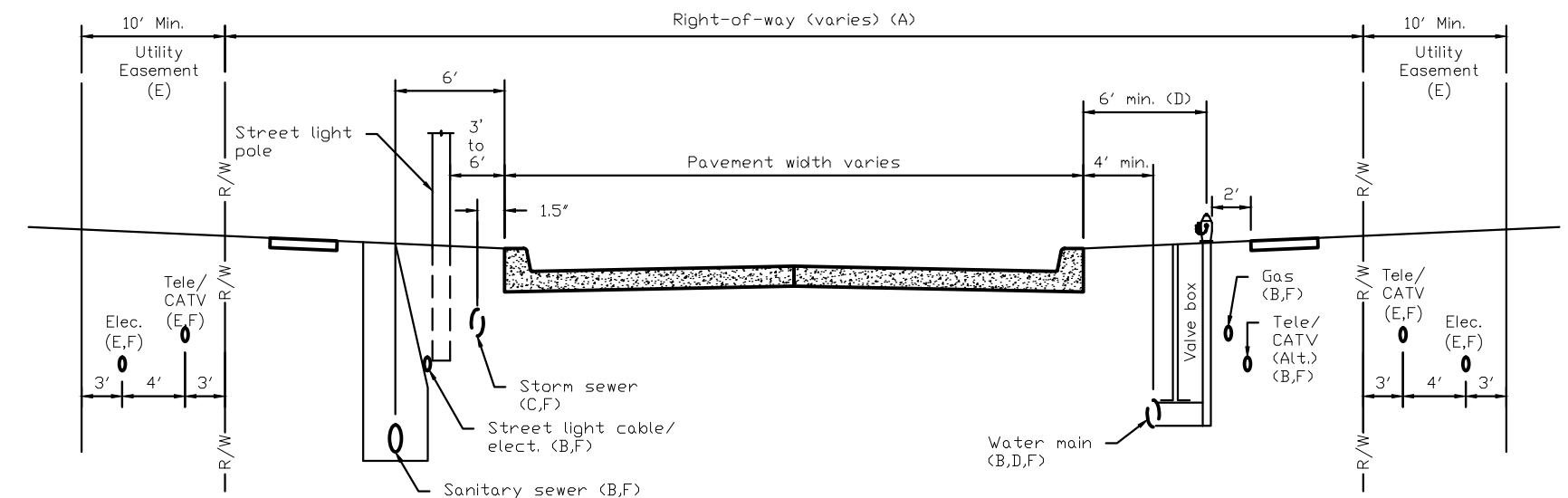


NOTE  
 CORE DRILL ALL STORM SEWER AND PLACE NON-SHRINK GROUT COLLAR AT CONNECTION.



NOTES  
 1. SLOPE SUBDRAINS TO DRAIN.

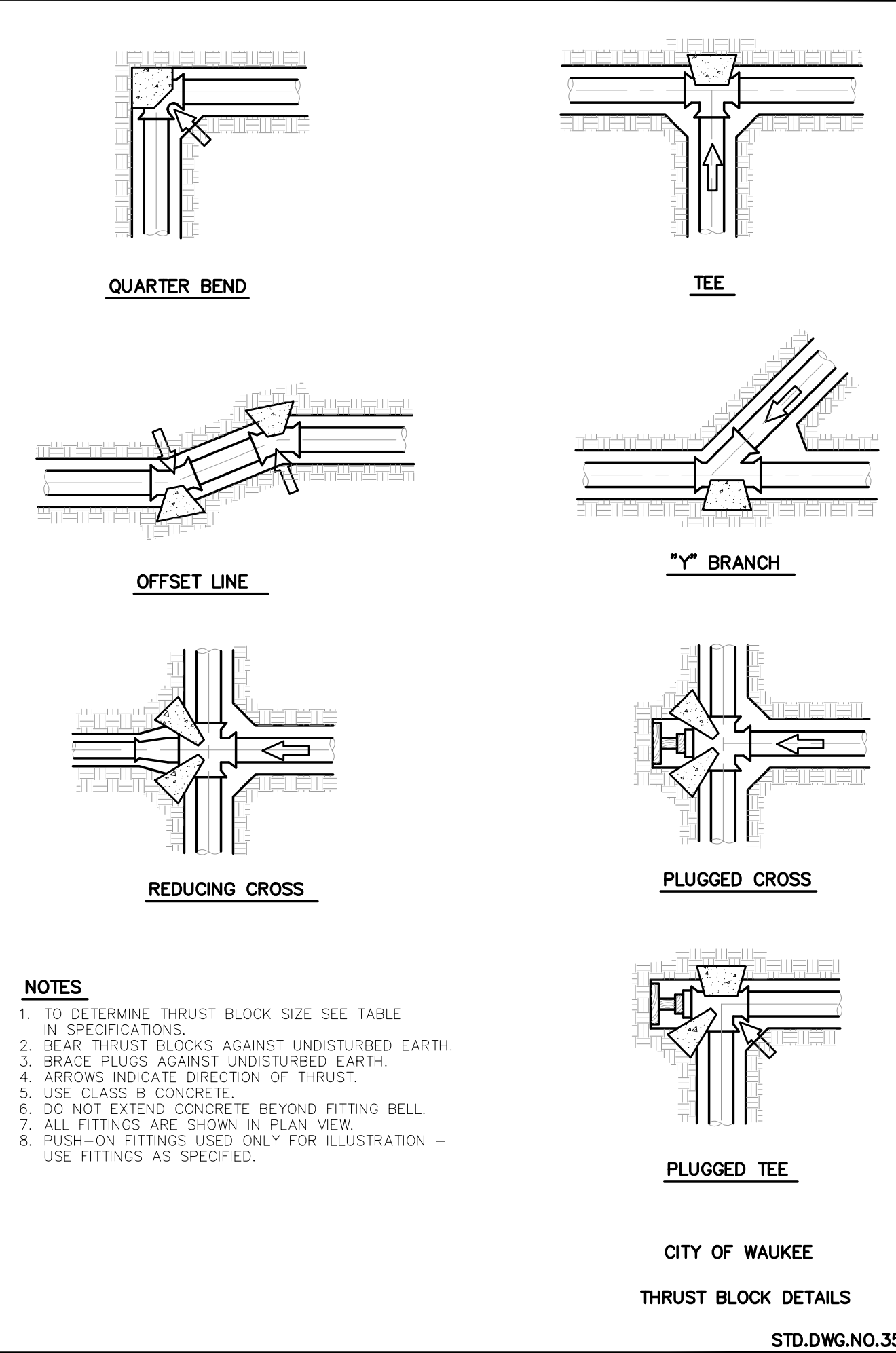
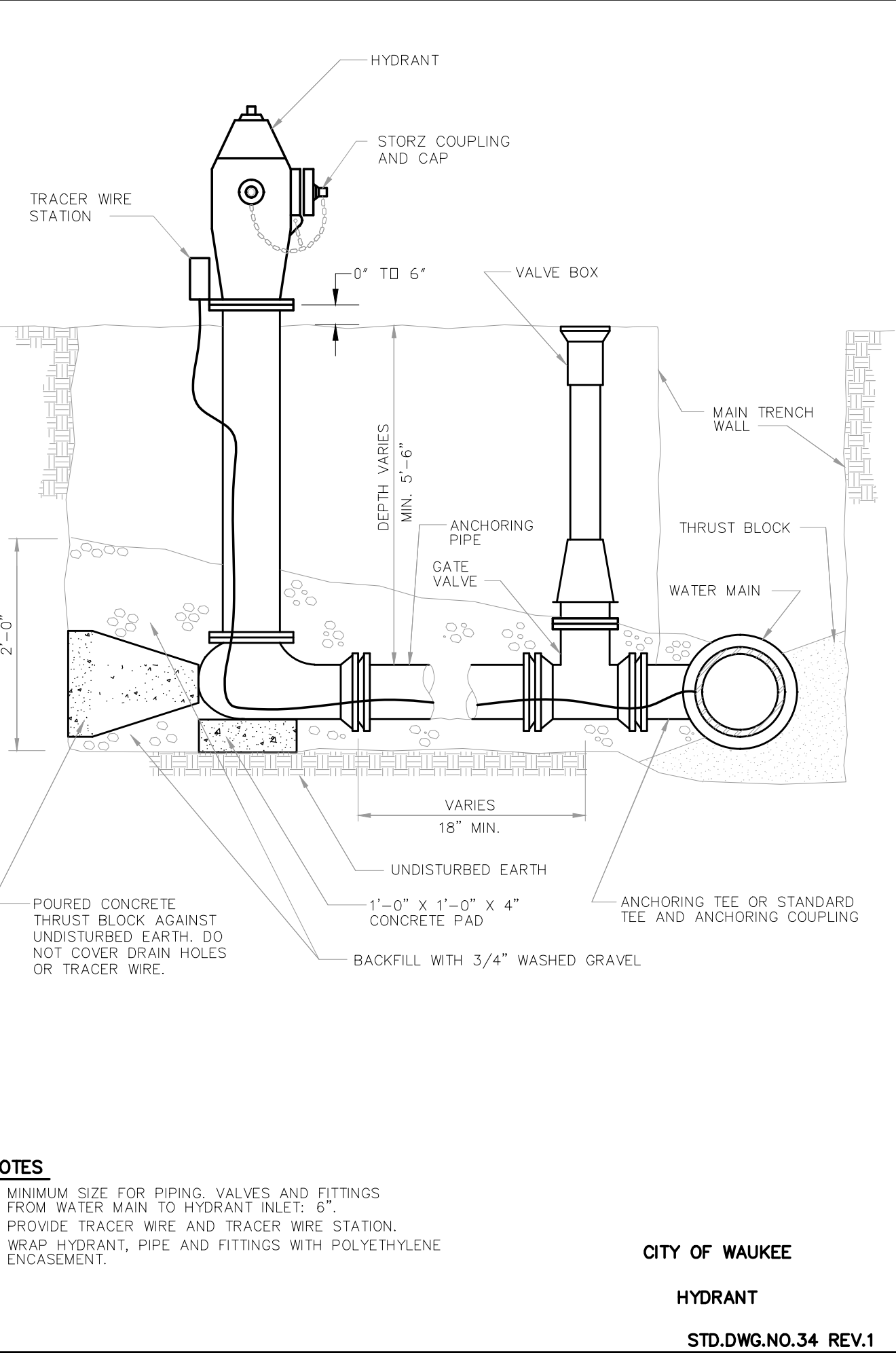
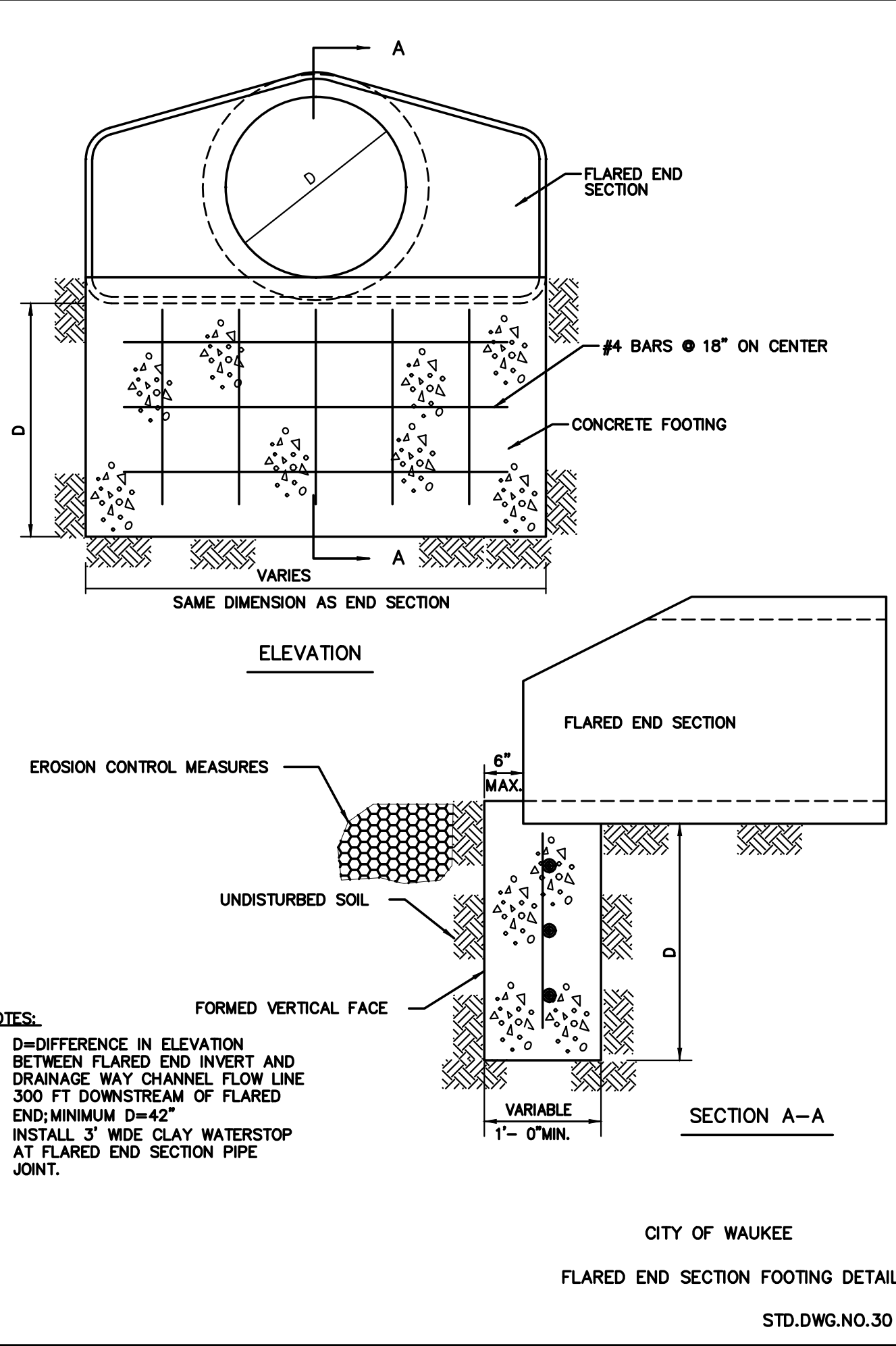
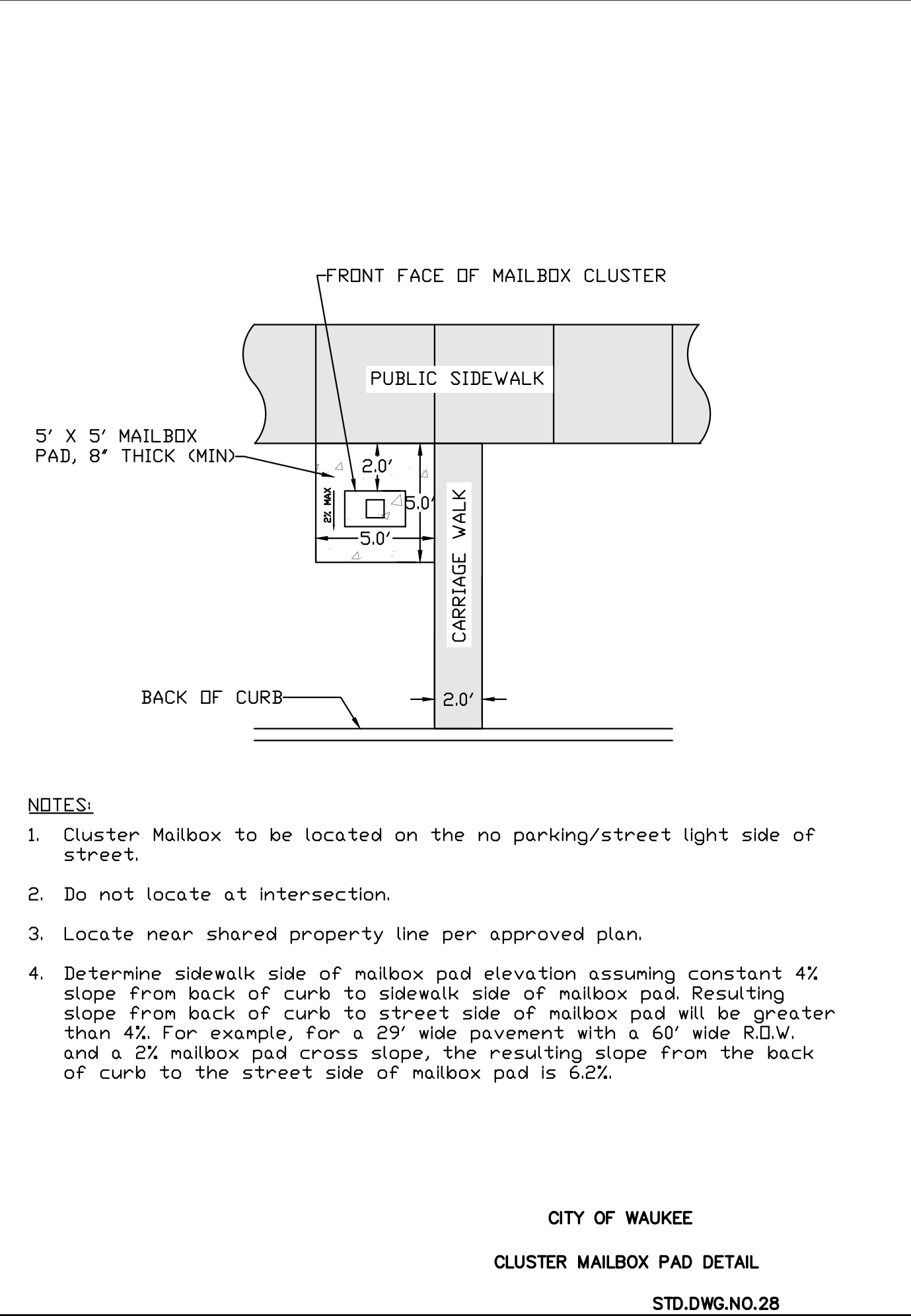
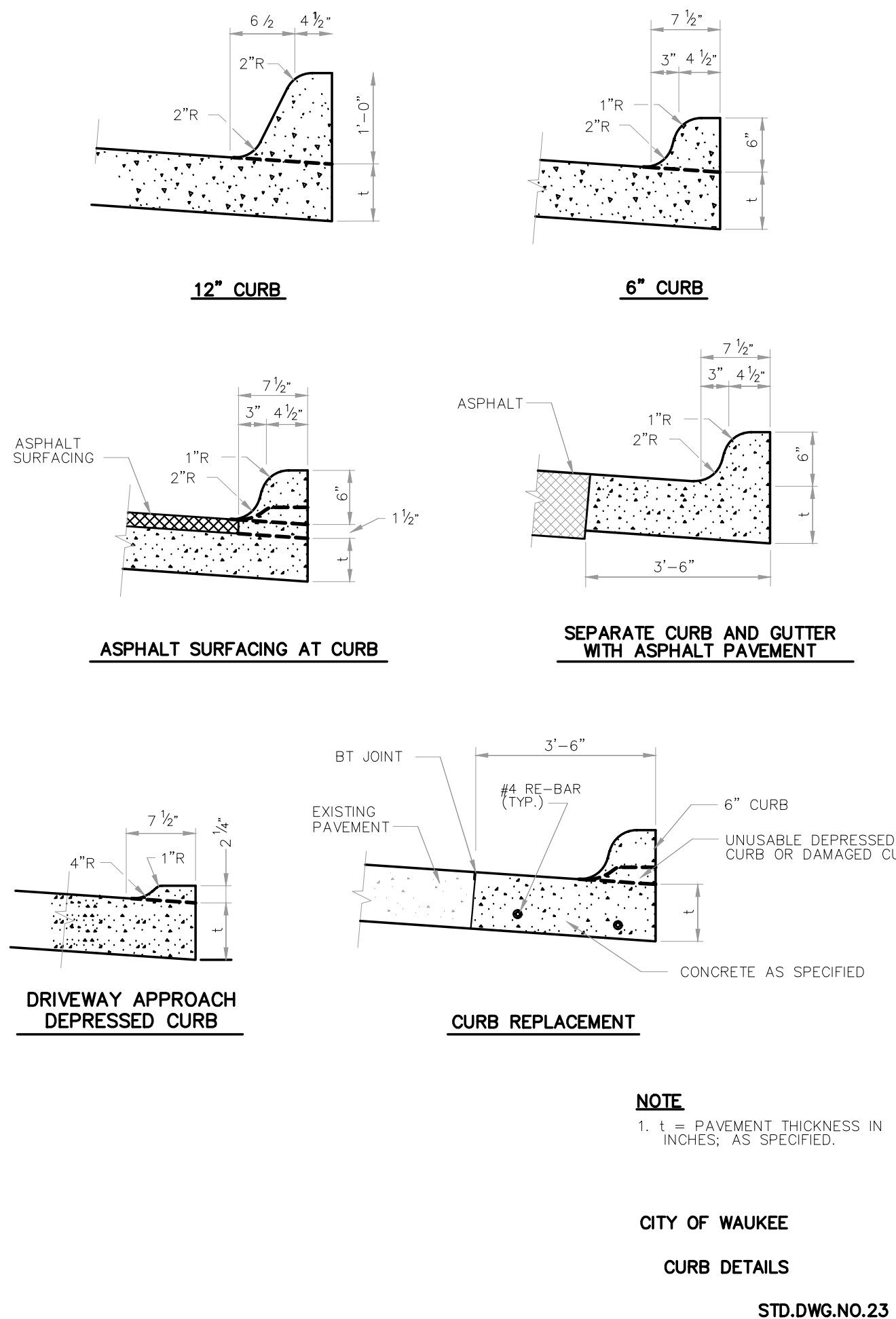
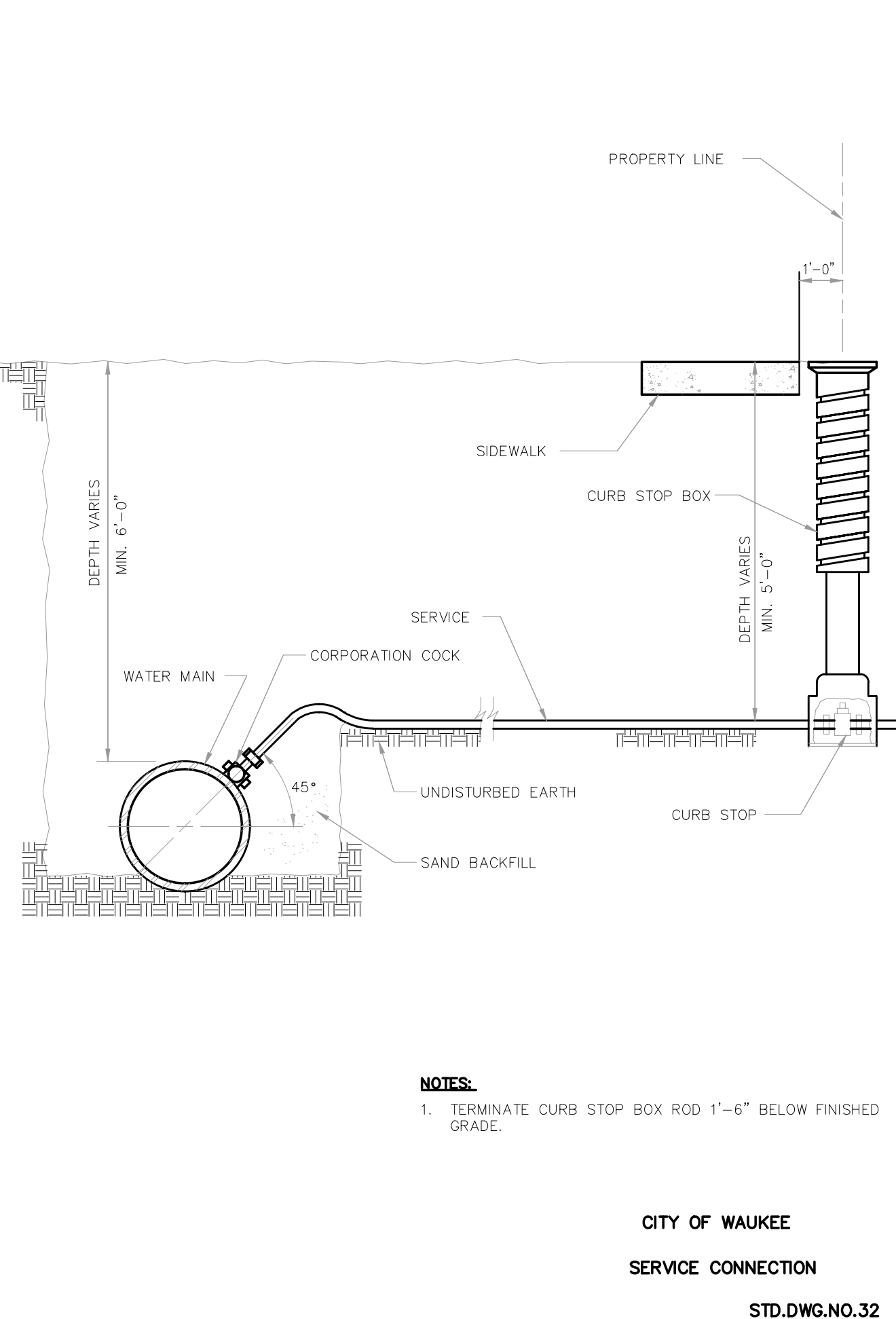
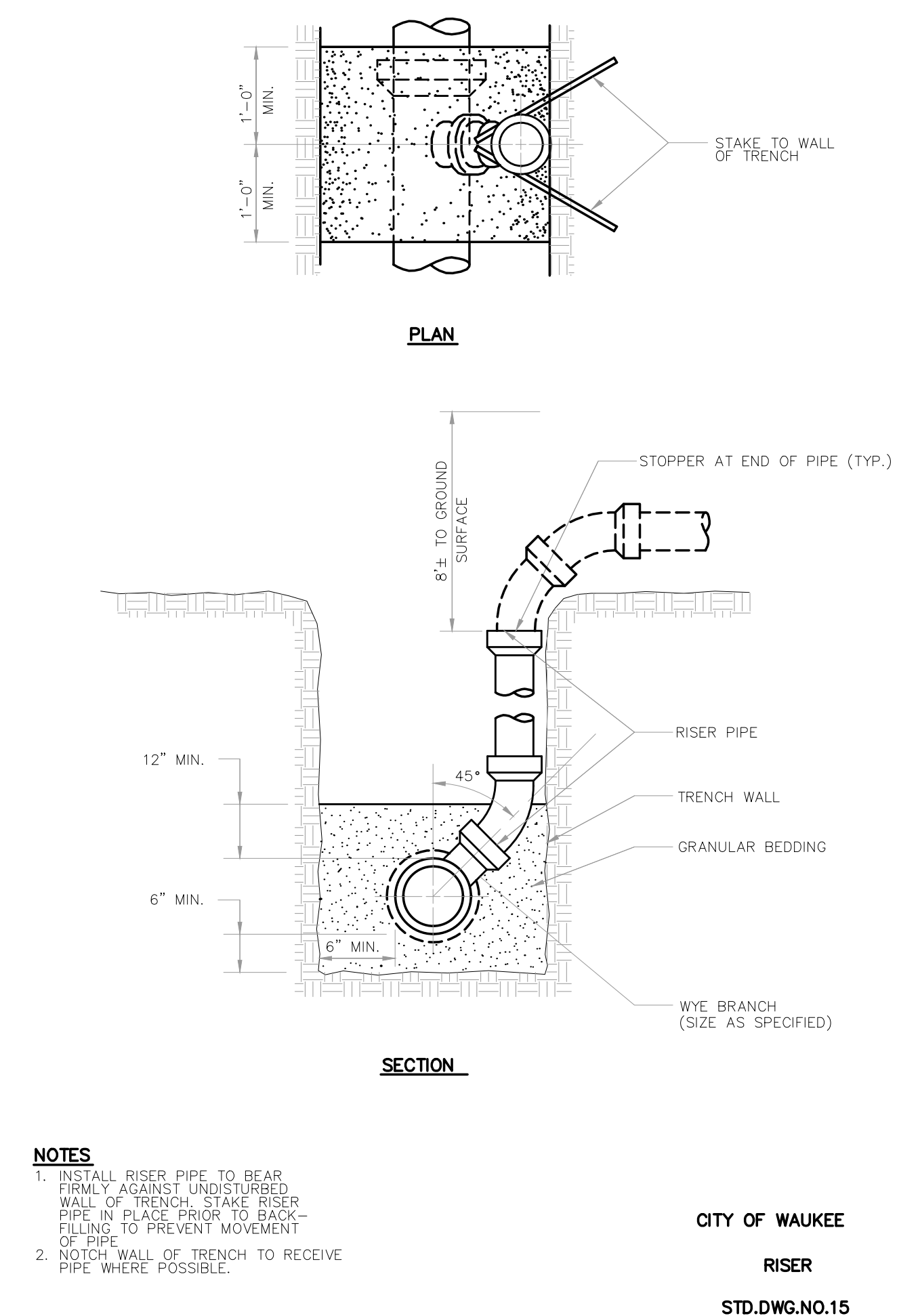
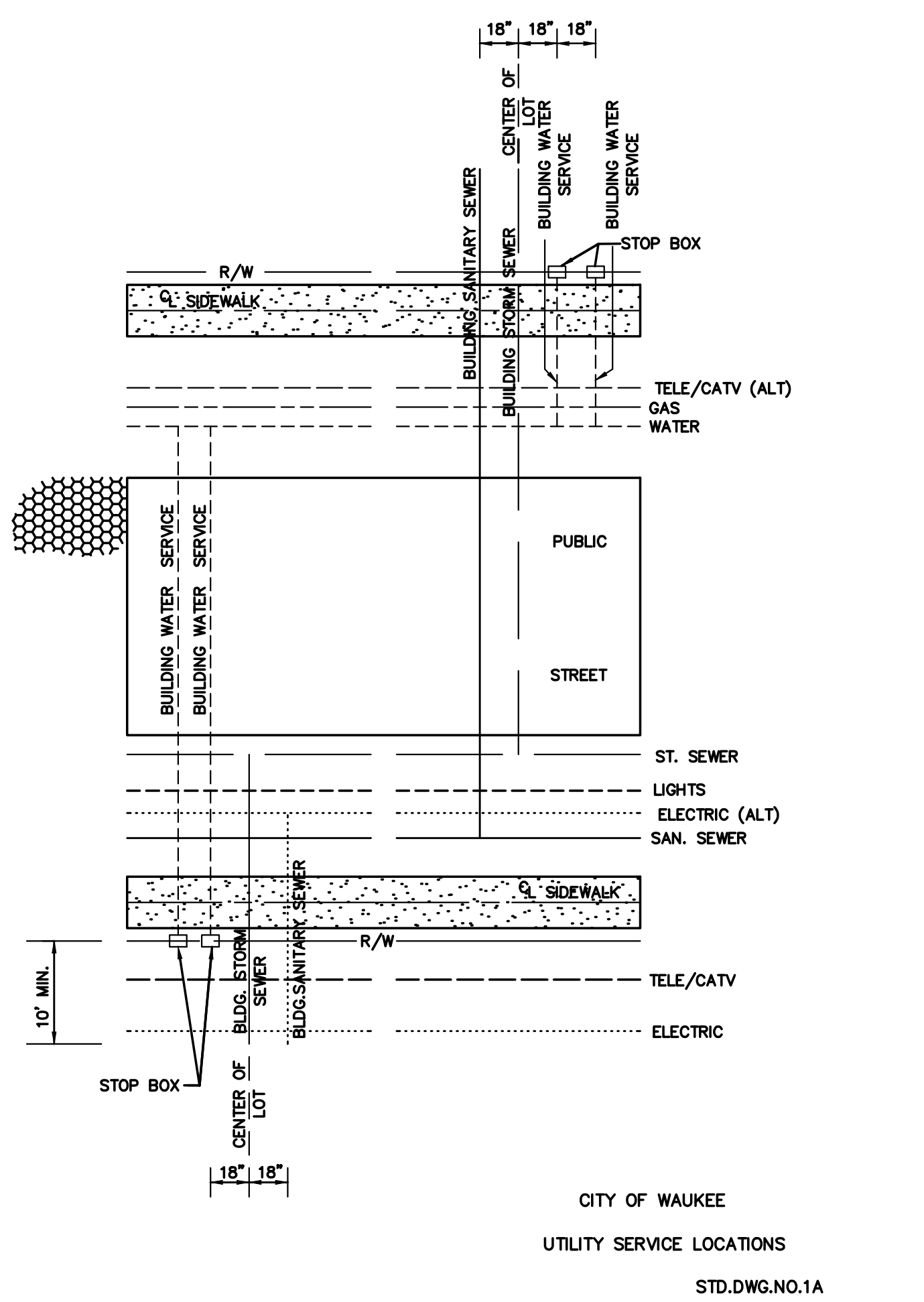
CITY OF WAUKEE  
 SUBDRAINS  
 STD.DWG.NO.37



GENERAL NOTES  
 A. ROW width varies.  
 B. When utilities are in the ROW, the following should be adhered to utilities otherwise provided/approved:  
 1. All utilities should be buried. When overhead utilities are allowed to cross the roadway, then minimum vertical clearances are 20 feet for the main cable and 18 feet for services.  
 2. Telephone, cable TV, and water: install on the east and south side of the road.  
 3. Gas and electric: install on the west and north side of the road.  
 4. Sanitary sewer: install on the west and north side of the road.  
 C. Storm Sewers: The normal location for a storm sewer is 1.5 feet from back of curb. When combination manholes and intakes are used, the location increases to 5 feet.  
 D. Water mains, valves, and hydrants:  
 1. The normal water main location is 4 feet behind the back of curb. In areas of combination manholes and intakes, this distance is increased to a minimum of 6 feet.  
 2. For local streets and minor collectors with limited ROW, use a 90° anchoring elbow between the hydrant tee and the valve. For maintenance purposes, the minimum distance between the centerline of the valve box and the face of the hydrant is 18 inches.  
 E. Utility Easement: Telephone, fiber optic, cable TV, electric, and gas lines should be located in front or rear yard easements. Normally telephone and cable TV lines are placed in rear yard easements and fiber optic, electric, and gas lines in front yard easements. Upon approval of the jurisdiction, these utilities may be placed in the right of way at the alternative location when easements do not exist.  
 F. Depth of bury:  
 Cable TV (CATV): 3 feet minimum.  
 Electric (Elec.): The recommended depth of bury for electric cable is 4 feet. The minimum depth of bury for electric lines as per the National Electric Safety Code is:  
 15KV to 5KV cable - 30 inches minimum.  
 up to 600-volt cable - 24 inches minimum.  
 Street light cable - 18 inches minimum.  
 Gas: 3 feet minimum.  
 Water: varies.  
 Sanitary Sewer: Varies.  
 Storm sewer: Varies. Approximately 4 feet.  
 Telephone (Tele./Fiber optic (F.O.)): 3 feet minimum.

CITY OF WAUKEE  
 UTILITY SERVICE LOCATIONS  
 STD.DWG.NO.18

© Project 2017/07 - C&M Instruments - Legacy Pointe at Waukee - Plat 8 (Drawing) (Sheet) (Rev. 2017/07/24)



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**LEGACY POINTE AT WAUKEE**  
PLAT 8  
WAUKEE, IOWA  
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SHEET TITLE  
TYPICAL SECTIONS  
& DETAILS

SCALE:  
NO SCALE  
FIELD BOOK:  
54-B  
DRAWN BY:  
TRH  
APPROVED:  
EVR

REVISIONS:

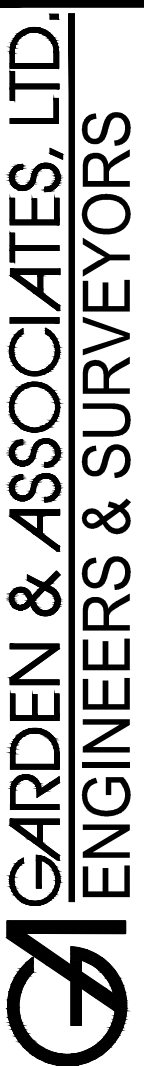
DATE:  
SEPT. 12, 2017

PROJECT NO.:  
7016107

SHEET NO.:  
B.02

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ESTIMATED PROJECT QUANTITIES				
Bid Item #	Bid Item	Unit	Estimated Quantity	Remarks
1	Mobilization	LS	1	
2	Excavation, Class 10	CY	6975	Class 10 excavation was calculated by surface comparison method, resulting in a total cut quantity of 6,975 cubic yards (CY). Based on a shrinkage factor of 30%, it is estimated that there will be 5,150 CY of fill resulting in an excess of 1,825 CY. Contractor will be responsible for removal of excess excavation from site and disposal at a site secured by the contractor. Payment for excavation will be based on plan quantity unless a change in horizontal or vertical alignment is made and approved by the engineer. Plan quantity is based on the 6,975 CY of cut. Item also includes stripping (minimum 8" lift), salvaging and respreading of topsoil on site. Top 6" of respread topsoil shall be prepared for seeding per specifications. No separate payment will be made for handling of topsoil.
3	Subgrade Preparation	SY	2230	See typical P.C.C. Pavement Section on sheet B.01 for additional information.
4	Compaction Testing	LS	1	Contractor is responsible for all testing. Testing must be performed by an independent testing laboratory subject to approval by City.
5	Trench Compaction Testing	LS	1	Contractor is responsible for all testing. Testing must be performed by an independent testing laboratory subject to approval by City.
6	Sanitary Sewer Gravity Main Trenched, PVC Truss, 8"	LF	695	
7	Sanitary Sewer Service Stub, PVC, 4"	LF	744	Include cost of all fittings required in unit price for sanitary sewer stub. No separate payment will be made for any fittings required.
8	Storm Sewer Trenched, RCP, 18"	LF	60	Length includes aprons
9	Storm Sewer Trenched, RCP, 30" EQUIVALENT ARCH	LF	135	Length includes aprons
10	Pipe Apron, RCP, 18"	EA	2	See plan and profile sheets for apron locations. Install end section footings on all aprons. Include cost of end section footings installation in unit price for aprons. Tie apron and last three pipe joints per specifications.
11	Pipe Apron, RCP, 30" EQUIVALENT ARCH	EA	1	See plan and profile sheets for apron locations. Install end section footings on all aprons. Include cost of end section footings installation in unit price for aprons. Tie apron and last three pipe joints per specifications.
12	Longitudinal Subdrain, 4"	LF	580	
13	Longitudinal Subdrain/ Sump Pump Collector, 8"	LF	1370	Subdrain/sump pump collector shall be perforated with tracer wire. Includes connections under roadway for yard subdrain.
14	Footing Drain Cleanout, PVC, 8"	EA	8	
15	Footing Drain Cleanout, PVC, 4"	EA	1	
16	Subdrain Outlet and Connection	EA	4	Install subdrain outlets at locations shown on plans. Refer to IDOT DR-303 for intake outlets.
17	Storm Sewer Service Stub, PVC, 4"	LF	534	
18	Water Main, Trenched, PVC, 8"	LF	680	Include cost of all fittings required in unit price for water main. No separate payment will be made for any fittings required.
19	Water Service Stub, Copper, 1"	EA	22	
20	Water Service Stub, Copper, 1 1/2"	EA	1	
21	Fire Hydrant Assembly	EA	3	Hydrants shall be Waterous Pacer WB-67 safety flange or approved equal, with hydrant auxiliary valve and valve box.
22	Connection to Existing Water Main	EA	2	Item shall include all work and fittings required to connect to existing water main.
23	Manhole, SW-301, 48"	EA	4	All manhole casting in pavement shall be SW-601 Type D (3 piece floating). All manholes shall have infiltration barriers installed as specified. Boxouts in pavement will not be allowed unless approved by Jurisdiction.
24	Intake, SW-503, 48"	EA	1	Item shall include all work and material needed for complete installation of intake.
25	Intake, SW-501	EA	1	Item shall include all work and material needed for complete installation of intake.
26	Connection to Existing Manhole	EA	1	Includes cost of removing existing sanitary sewer stub.
27	Pavement, PCC, 7"	SY	1951	Item includes reinforcement, joints and sealing, and surface curing and pavement protection.
28	PCC Pavement Samples & Testing	LS	1	Contractor is responsible for all testing. Testing must be performed by an independent testing laboratory subject to approval by City.
29	Conventional Seeding, Seeding, Fertilizing, & Mulching	ACRES	4	Fertilize, seed, and mulch all areas disturbed by construction. Use Type 1 (Permanent Lawn Mixture) seed mix. Watering of the completed seed bed is not required.
30	SWPPP Management	LS	1	Contractor is responsible for all management.
31	Rip-Rap	TON	72	
32	Silt Fence	LF	1800	Contractor is responsible for all installation and removal
33	Inlet Protection Device	EA	2	
34	Orifice Plate	EA	1	See details on sheet M.01.
35	Mailbox Pad	EA	2	See details on sheet B.02



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LEGACY POINTE AT WAUKEE  
PLAT 8  
WAUKEE, IOWA  
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SHEET TITLE  
PROJECT  
QUANTITIES

SCALE:  
NO SCALE  
FIELD BOOK:  
54-B  
DRAWN BY:  
TRH  
APPROVED:  
EVR

REVISIONS:  
10-13-17- added 4" subdrain  
cleanout  
2-28-18-added additional  
storm & sanitary services

DATE:  
SEPT. 12, 2017

PROJECT NO.:  
7016107

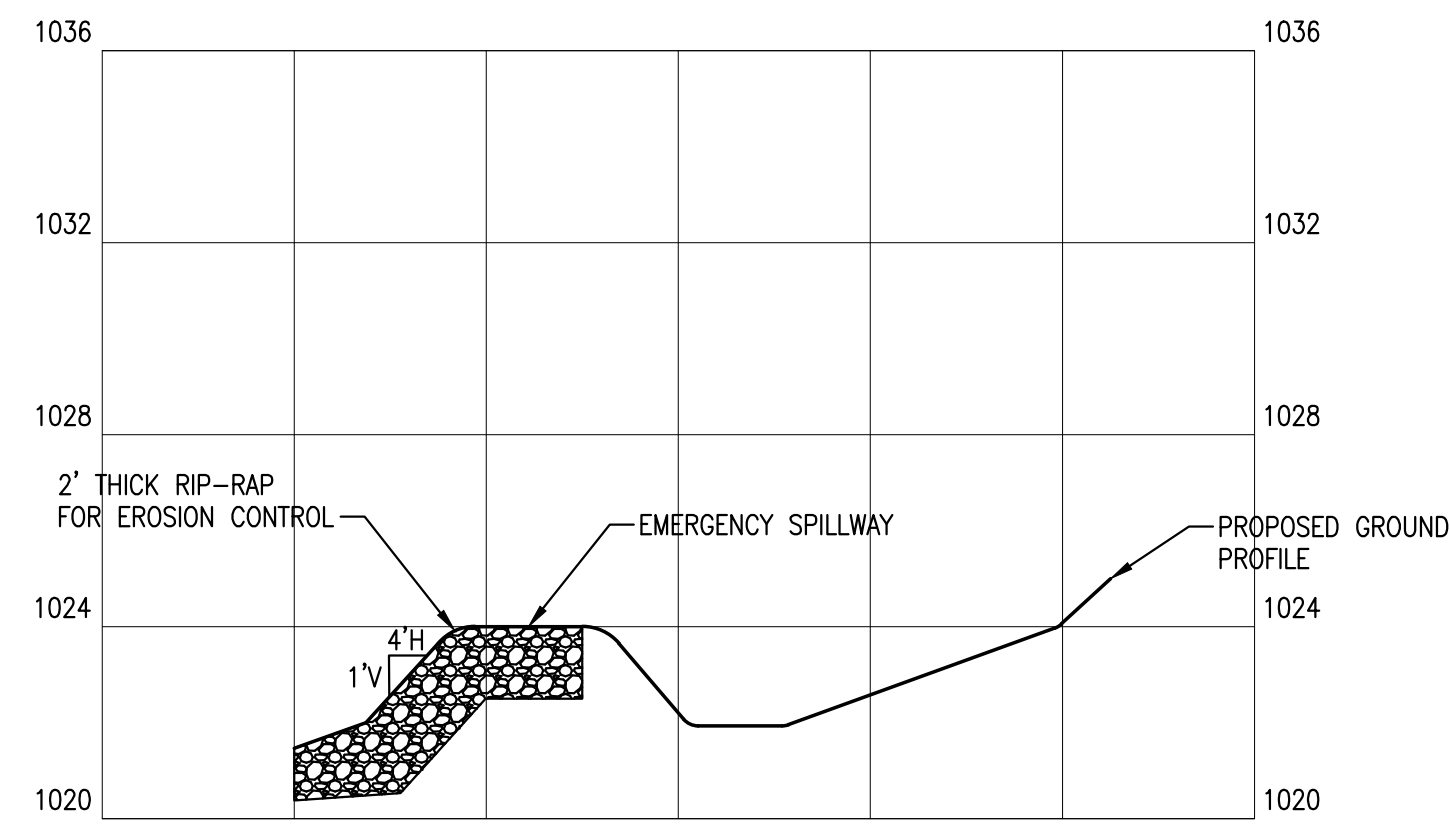
SHEET NO.:  
C.01

TRACT RECORDED IN  
BOOK 633, PAGE 618

OWNER: CAROLE E. & ARTHUR B. J. CRATE  
CLIVE ZONING: C4-PLANNED SHOPPING CENTER COMMERCIAL DISTRICT

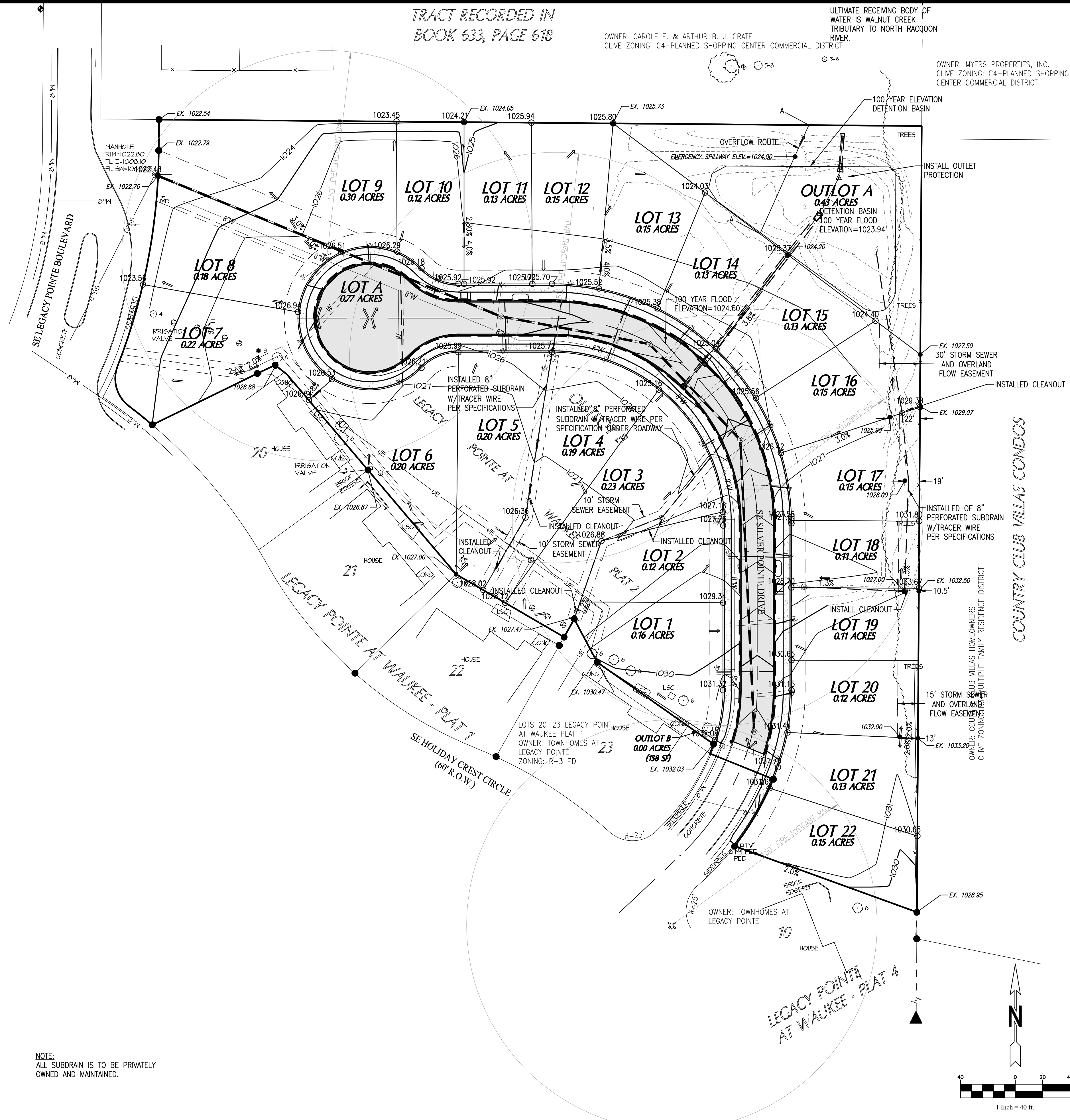
ULTIMATE RECEIVING BODY OF  
WATER IS WALNUT CREEK  
TRIBUTARY TO NORTH RACQUON  
RIVER.

OWNER: MYERS PROPERTIES, INC.  
CLIVE ZONING: C4-PLANNED SHOPPING  
CENTER COMMERCIAL DISTRICT



SECTION A-A  
HORIZ. 1"=20'; VERT. 1"=4'

NOTE:  
ALL WORK IS TO BE CONTAINED  
WITHIN THE PROPERTY LINES.



NOTE:  
ALL SUBDRAIN IS TO BE PRIVATELY  
OWNED AND MAINTAINED.

LOT #	MOE/MPE
LOT 1	NA**
LOT 2	NA**
LOT 3	NA**
LOT 4	NA*
LOT 5	NA*
LOT 6	NA*
LOT 7	1025 *
LOT 8	1025 *
LOT 9	NA*
LOT 10	NA**
LOT 11	NA*
*	LOT FLOWS FRONT TO BACK
**	LOT FLOWS BACK TO FRONT

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LEGACY POINTE AT WAUKEE  
PLAT 8  
WAUKEE, IOWA

SHEET TITLE  
GRADING PLAN

SCALE:  
AS NOTED

FIELD BOOK:  
54-B

DRAWN BY:  
TRH

APPROVED:  
EVR

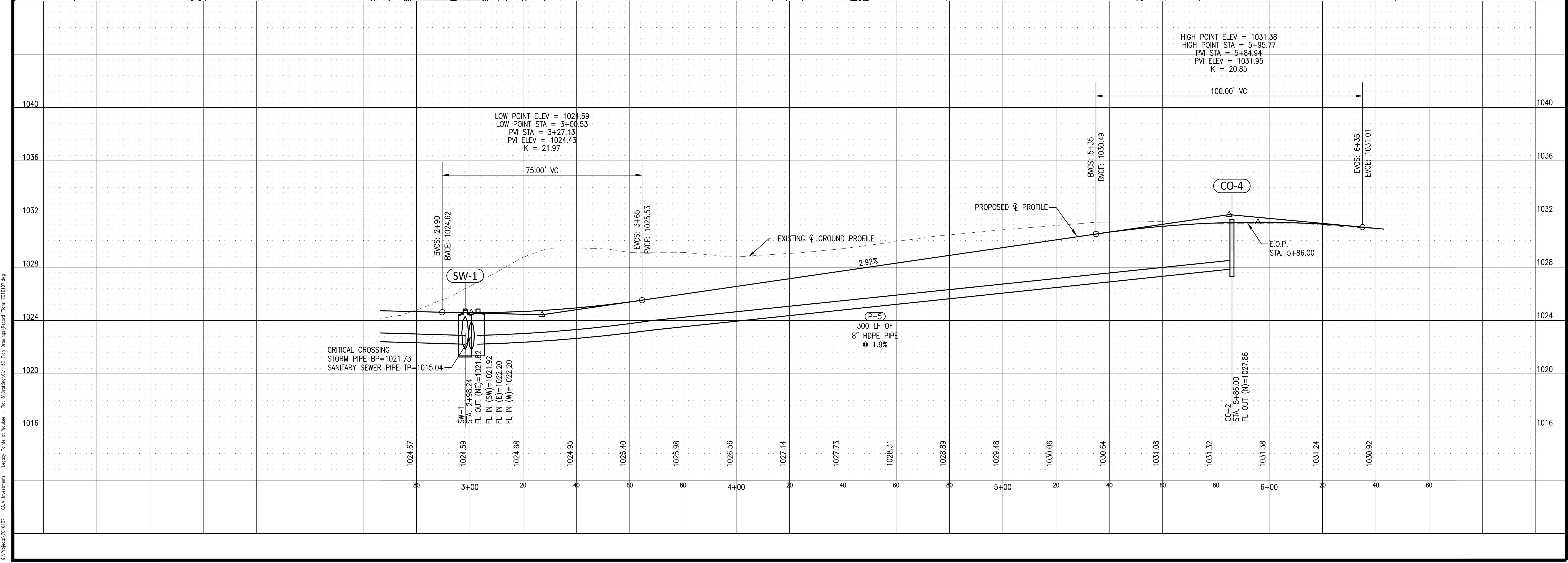
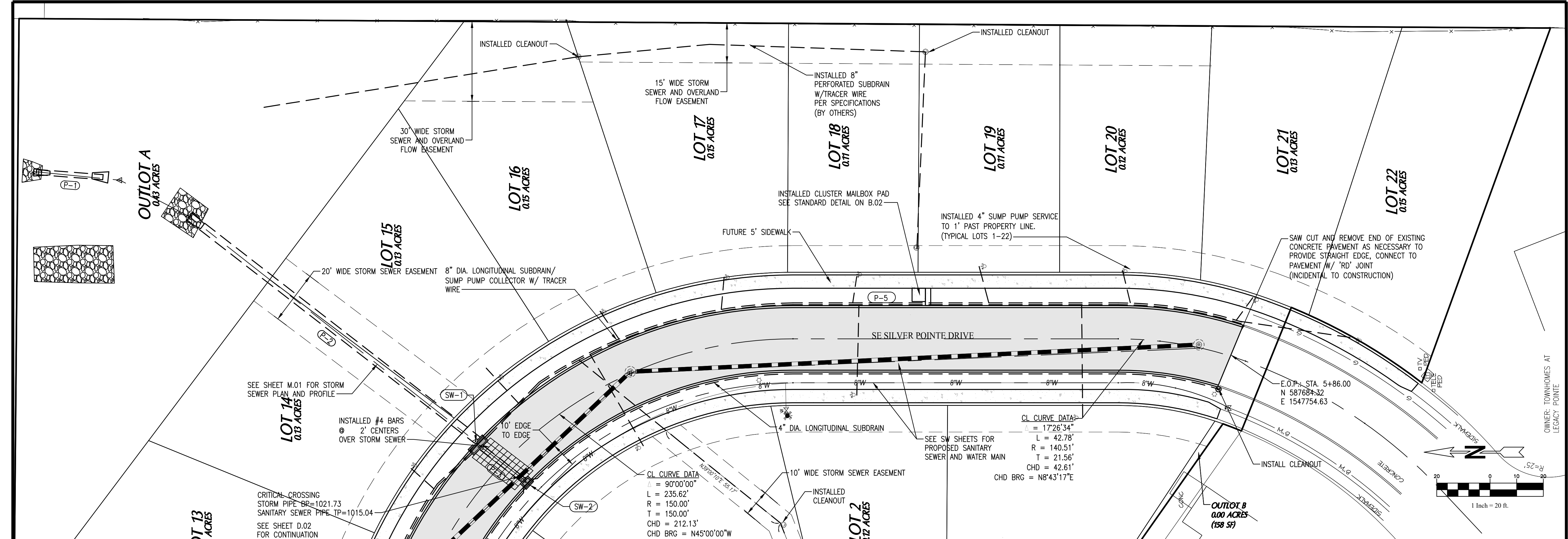
REVISIONS:  
9-28-2017- removed installed  
by other note on subdrain  
and cleanouts  
8-9-18 RECORD DRAWINGS

DATE:  
SEPT. 12, 2017

PROJECT NO.:  
7016107

SHEET NO.:  
D.01





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**ENGINEERS & SURVEYORS**

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**LEGACY POINTE AT WAUKEE**  
**PLAT 8**  
**WAUKEE, IOWA**

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SHEET TITLE  
**PLAN & PROFILE**

SCALE:  
 1"=20' HORIZ. 1"=4' VERT.

FIELD BOOK:  
 54-B

DRAWN BY:  
 TRH

APPROVED:  
 EVR

REVISIONS:  
 10-13-17-added 4" subdrain  
 cleanout  
 8-9-18 RECORD DRAWINGS

DATE:  
 SEPT. 12, 2017

PROJECT NO.:  
 7016107

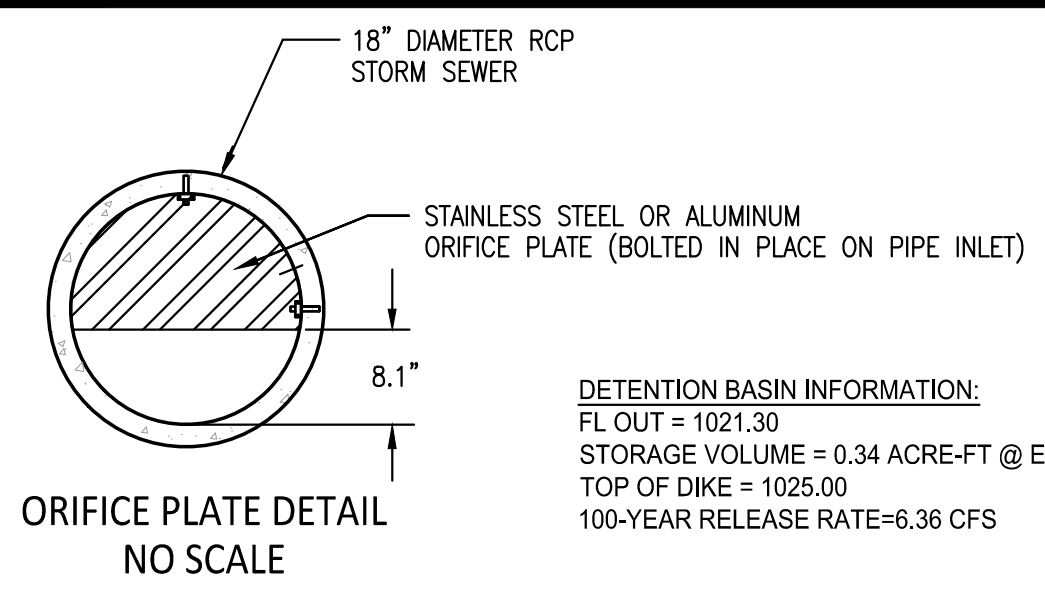
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© Project 2017.07 - CAD Instruments - Legacy Pointe at Waukee - Plat 8 (Drawing) Civil 3D File Drawing (Record) Date: 2016.07.04

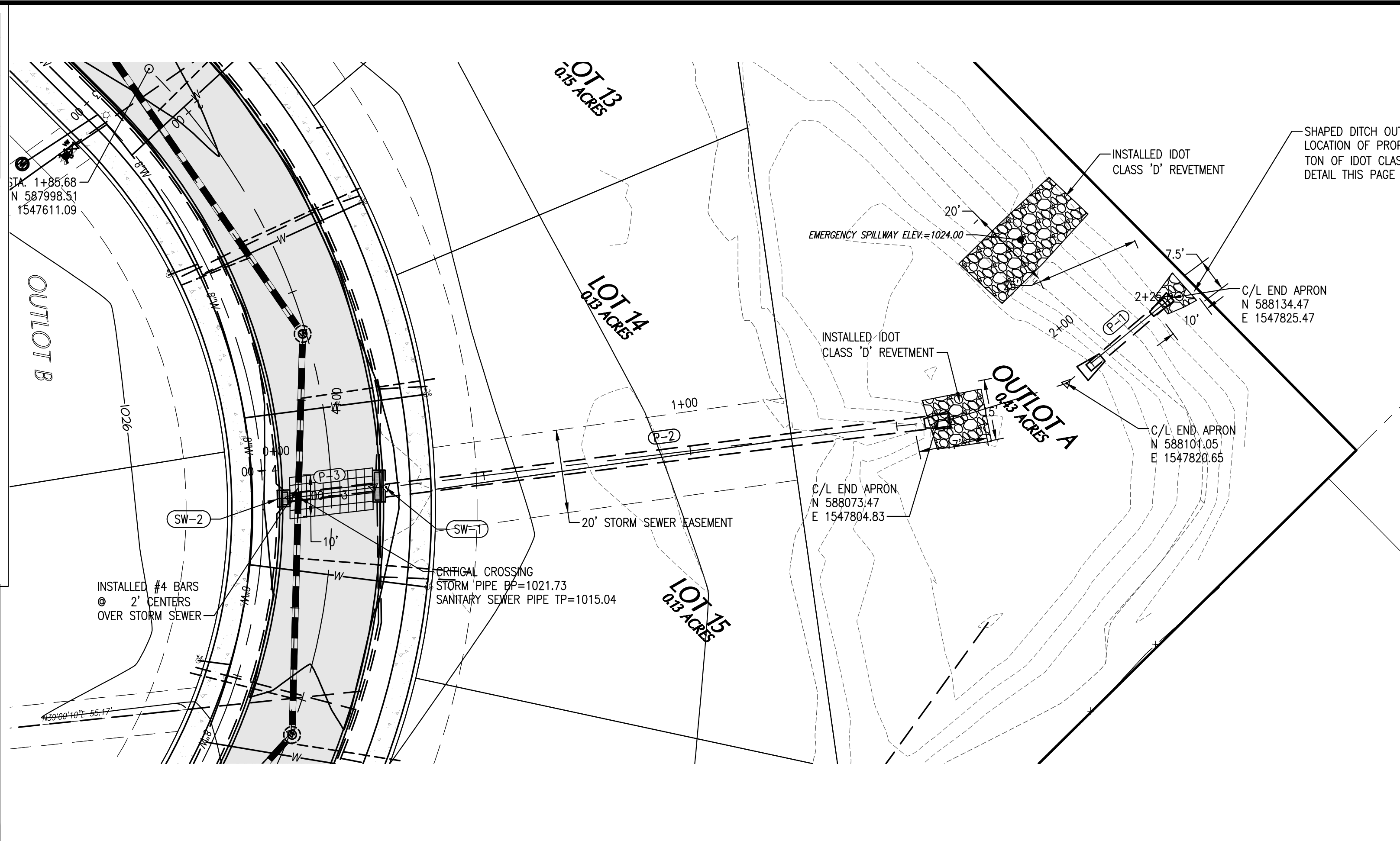


STORM SEWER STRUCTURE TABLE						
STRUCTURE NO.	NORTHING	EASTING	STATION	OFFSET FROM	TOP OF CURB OR RIM ELEV.	STRUCTURE TYPE
CO-1	587997.64	1547438.96	0+11.70	0.00' RT.	1029.37	CLEANOUT
CO-2	587688.82	1547742.21	5+86.00	13.00' LT.	1031.64	CLEANOUT
SW-1	587965.62	1547723.74	2+98.23	12.50' LT.	1024.85	SW-505 INTAKE
SW-2	587947.60	1547706.41	3+00.59	12.50' RT.	1024.85	SW-501 INTAKE

STORM SEWER PIPE TABLE								
PIPE	DIAMETER	MATERIAL	FROM	TO	LENGTH	SLOPE	PIPE E IN	PIPE E OUT
P-1	18"	RCP	INLET	OUTLET	33.8 LF	0.24%	1021.50	1021.34
P-2	30" ARCH	RCP	SW-1	OUTLET	134.9 LF	0.20%	1021.82	1021.56
P-3	18"	RCP	SW-2	SW-1	25.0 LF	0.20%	1022.11	1021.92
P-4	8"	HDPE	CO-1	SW-1	329.0 LF	0.50%	1023.84	1022.20
P-5	8"	HDPE	CO-2	SW-1	300.0 LF	1.90%	1027.86	1022.20

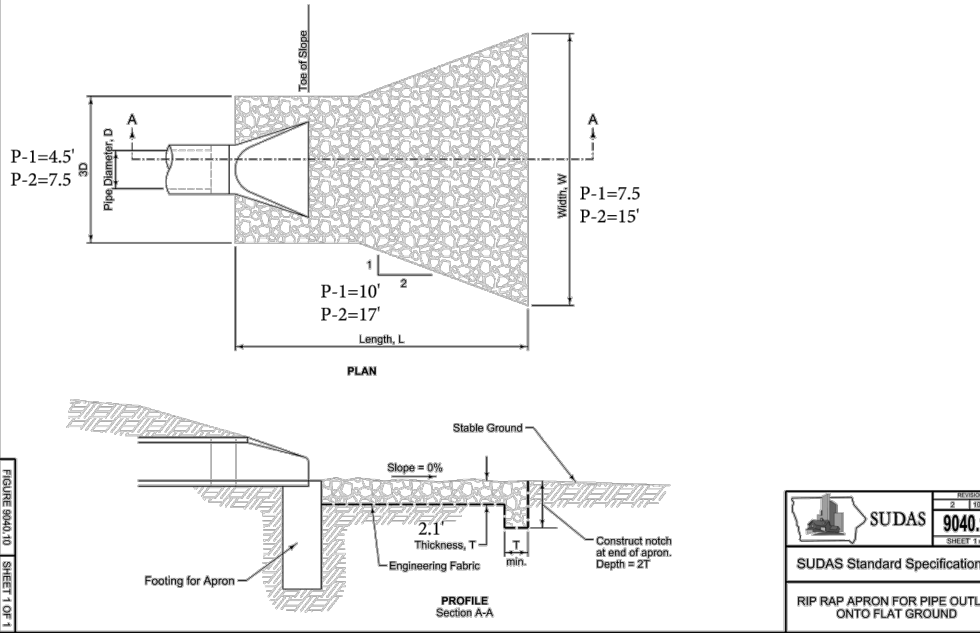


DETENTION BASIN INFORMATION:  
 FL OUT = 1021.30  
 STORAGE VOLUME = 0.34 ACRE-FT @ ELEV. 1024.00  
 TOP OF DIKE = 1025.00  
 100-YEAR RELEASE RATE=6.36 CFS



NOTE: OUTLOT A WILL BE OWNED AND MAINTAINED BY CAJM INVESTMENTS UNTIL TURNED OVER TO HOMEOWNERS ASSOCIATION.

- DETENTION BASIN MAINTENANCE:
1. YEARLY INSPECTION
  2. REMOVE TRASH AND DEBRIS AFTER LARGE RAIN EVENTS.
  3. REMOVE SILT AS NECESSARY TO MAINTAIN STORAGE.
  4. FIX ANY EROSION.



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 email@gardenassociates.net

LEGACY POINTE AT WAUKEE  
 PLAT 8  
 WAUKEE, IOWA  
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SHEET TITLE  
 STORM SEWER  
 PLAN & PROFILE

SCALE:  
 1"=20' HORIZ. 1"=4' VERT.

FIELD BOOK:  
 54-B

DRAWN BY:  
 TRH

APPROVED:  
 EVR

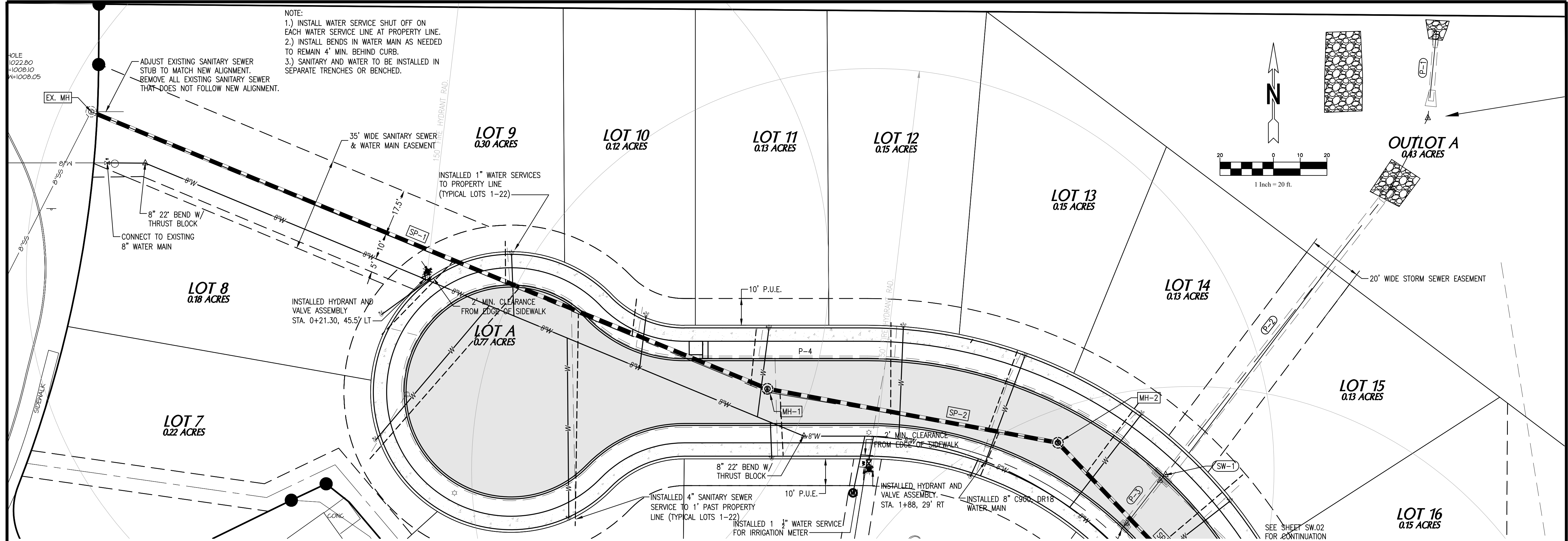
REVISIONS:  
 8-9-18 RECORD DRAWINGS

DATE:  
 SEPT. 12, 2017

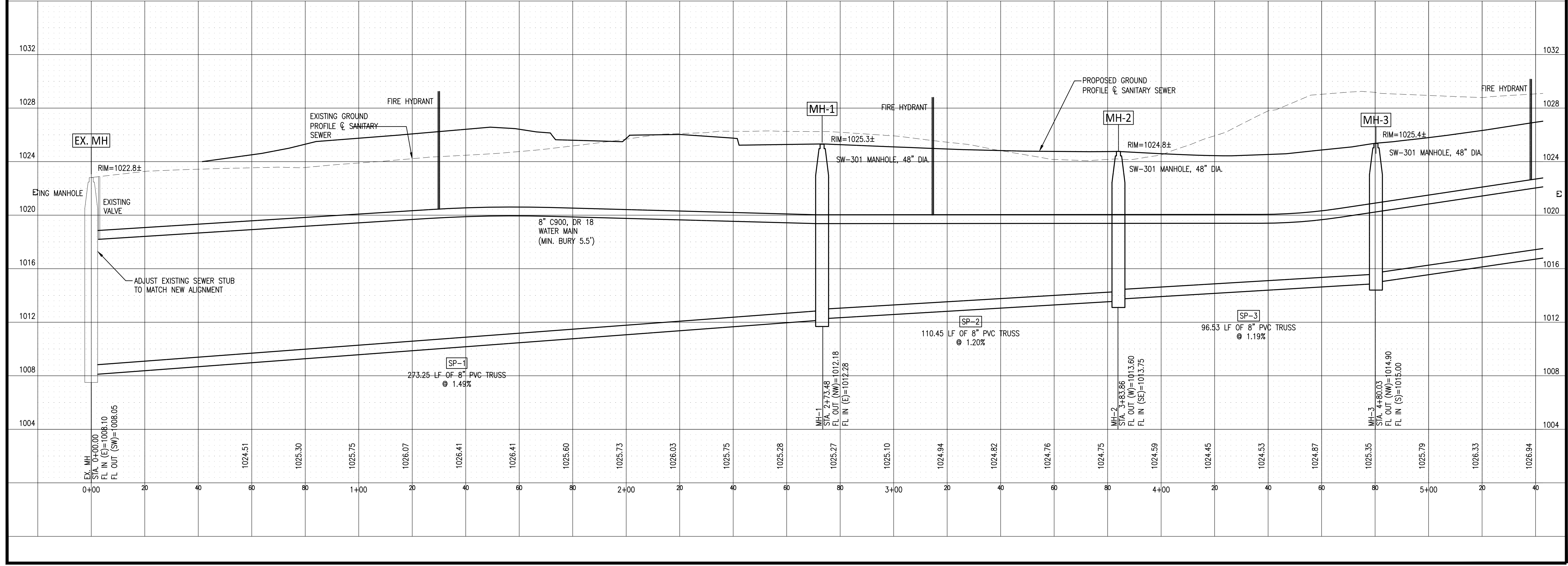
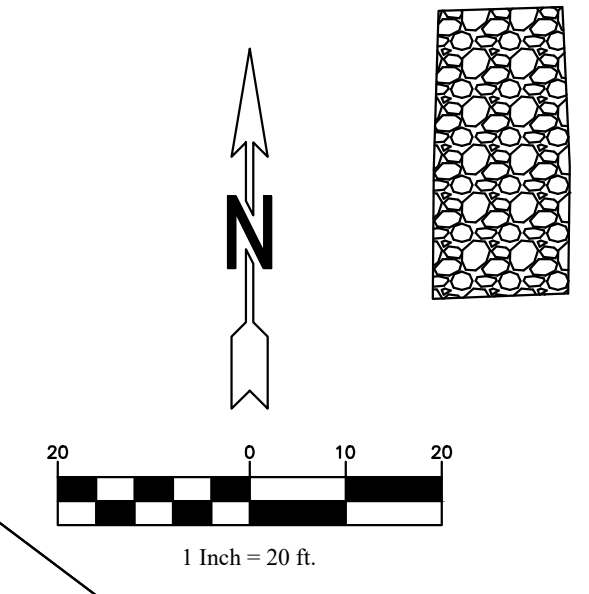
PROJECT NO.:  
 7016107

SHEET NO.:  
**M.01**

© Project 17016107 - CAJM Investments - Legacy Pointe at Waukee - Plat 8 (Drawing) Civil 3D File Drawing(s) Record Plans 7/20/17.dwg



NOTE:  
 1.) INSTALL WATER SERVICE SHUT OFF ON EACH WATER SERVICE LINE AT PROPERTY LINE.  
 2.) INSTALL BENDS IN WATER MAIN AS NEEDED TO REMAIN 4' MIN. BEHIND CURB.  
 3.) SANITARY AND WATER TO BE INSTALLED IN SEPARATE TRENCHES OR BENCHED.



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**LEGACY POINTE AT WAUKEE**  
**PLAT 8**  
**WAUKEE, IOWA**  
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SHEET TITLE  
**SANITARY SEWER AND WATER MAIN PLAN & PROFILE**

SCALE:  
 HORIZ. 1"=20'; VERT. 1"=4'  
 FIELD BOOK:  
 54-B  
 DRAWN BY:  
 TRH  
 APPROVED:  
 EVR

REVISIONS:  
 8-9-18 RECORD DRAWINGS

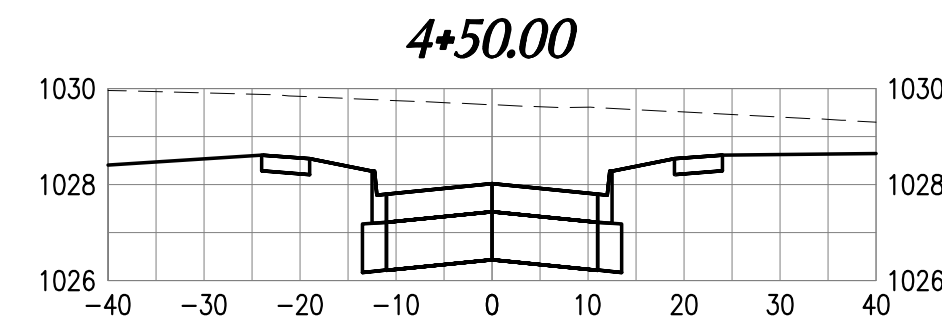
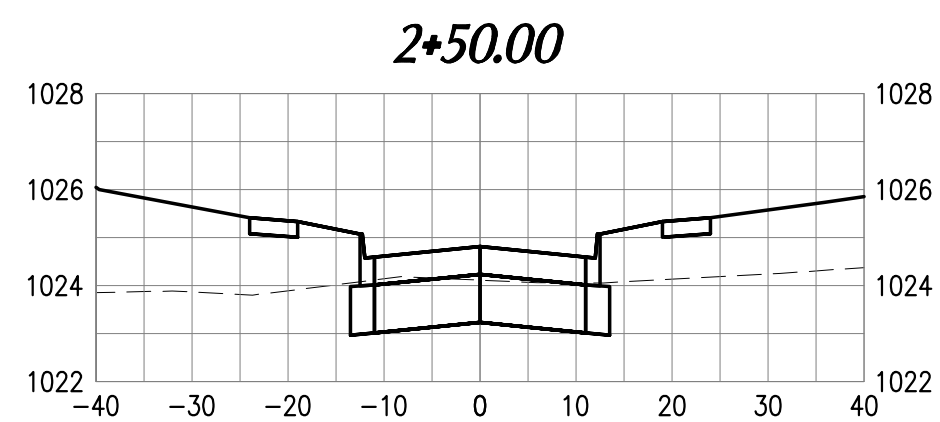
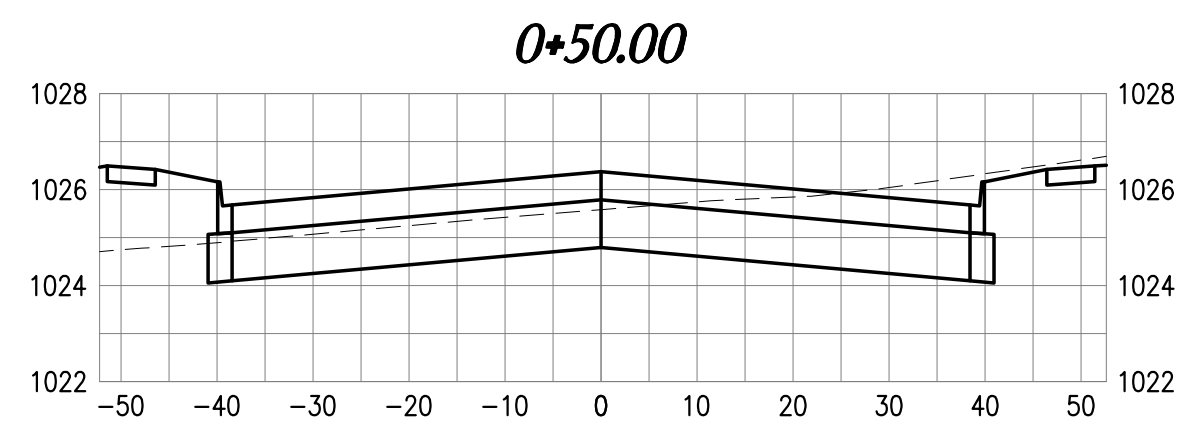
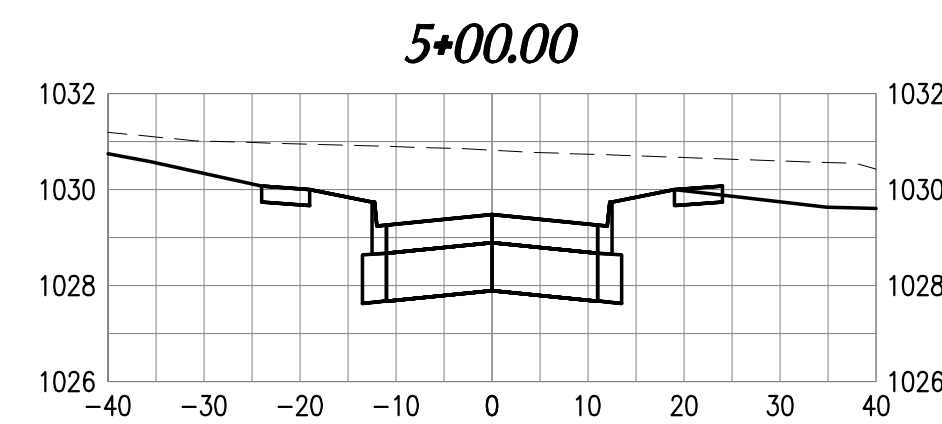
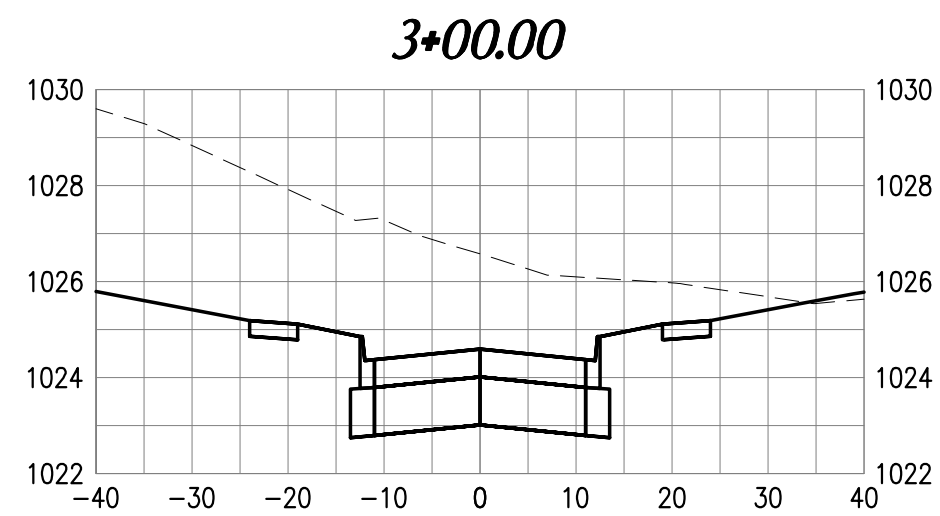
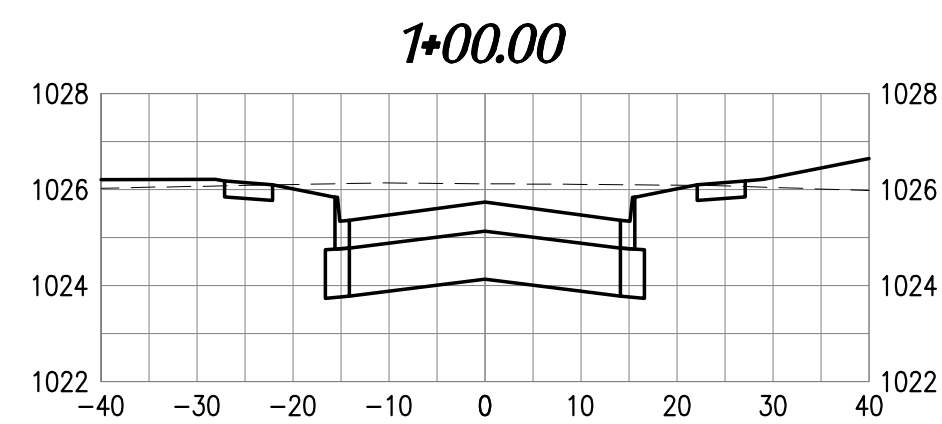
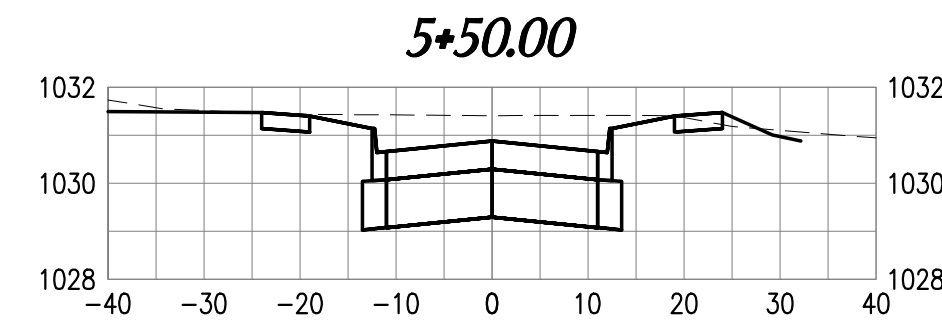
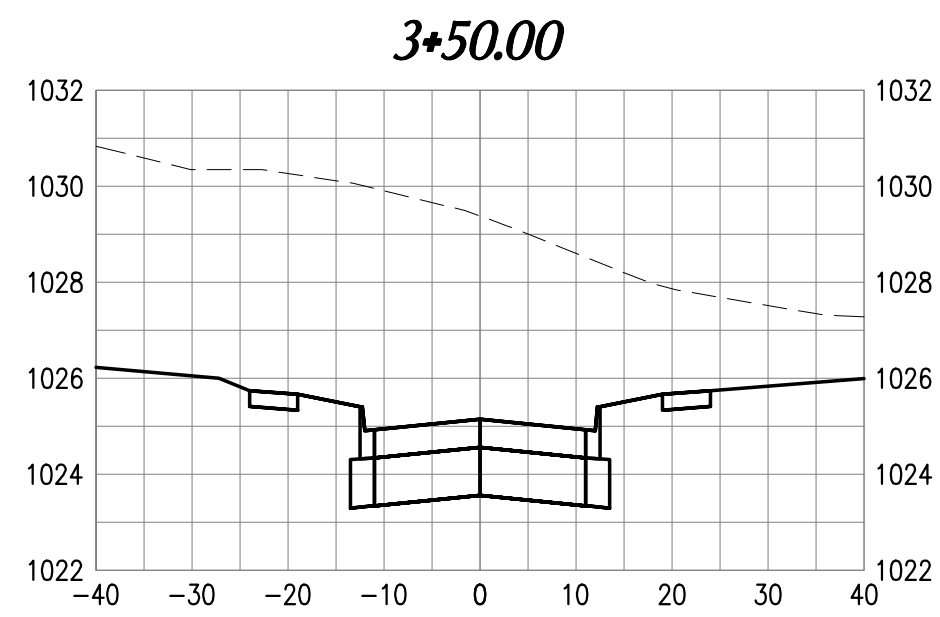
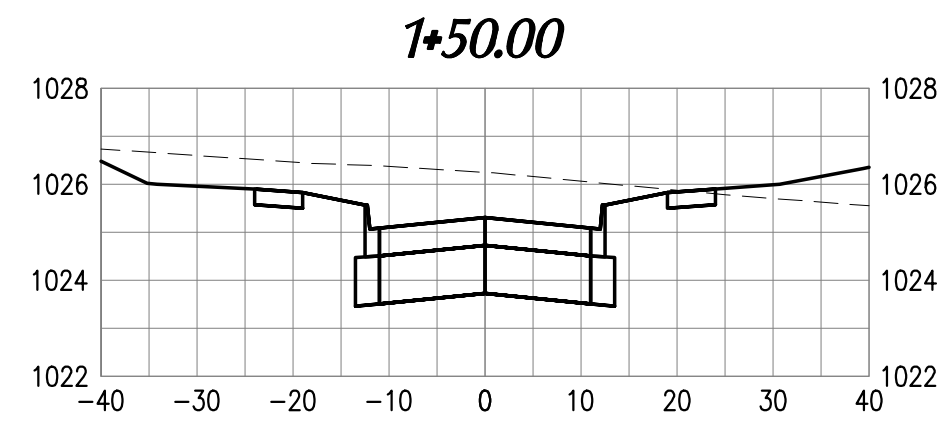
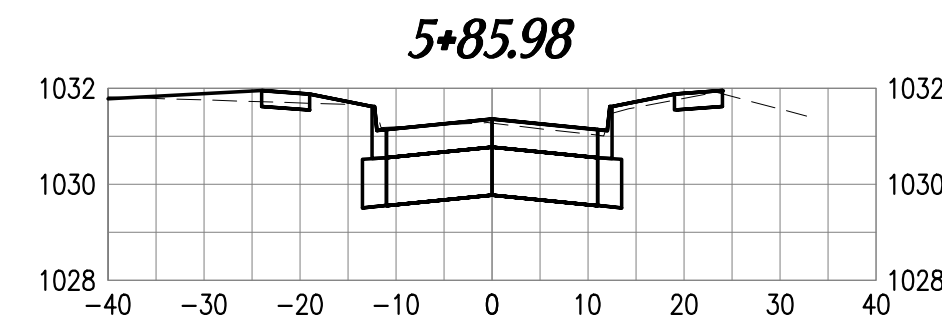
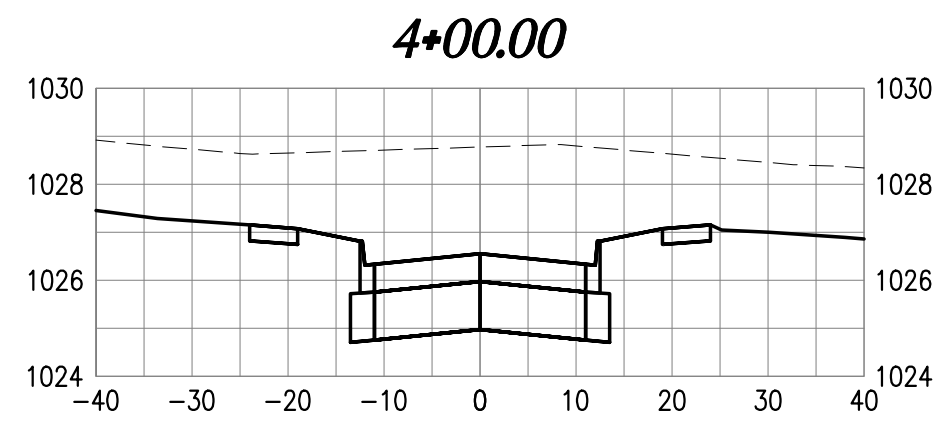
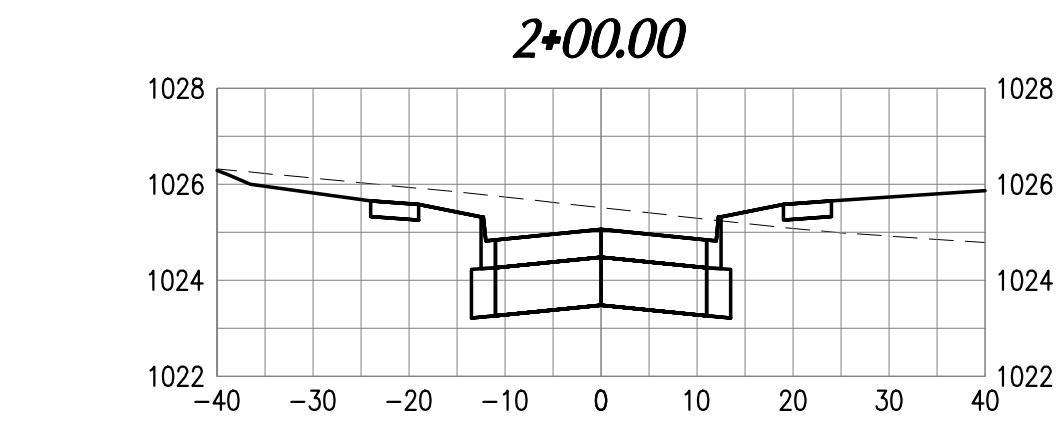
DATE:  
 SEPT. 12, 2017

PROJECT NO.:  
 7016107

SHEET NO.:  
**SW.01**

C:\Projects\2017\07 - C&M Incentives - Legacy Pointe at Wauke - Plat 8\Drawings\Record Plans\201607.dwg





**LEGACY POINTE AT WAUKEE**  
**PLAT 8**  
**WAUKEE, IOWA**  
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SHEET TITLE  
**CROSS SECTIONS**

SCALE:  
 HORIZ. 1"=20'; VERT. 1"=4'

FIELD BOOK:  
 54-B

DRAWN BY:  
 TRH

APPROVED:  
 EVR

REVISIONS:

DATE:  
 SEPT. 12, 2017

PROJECT NO.:  
 7016107

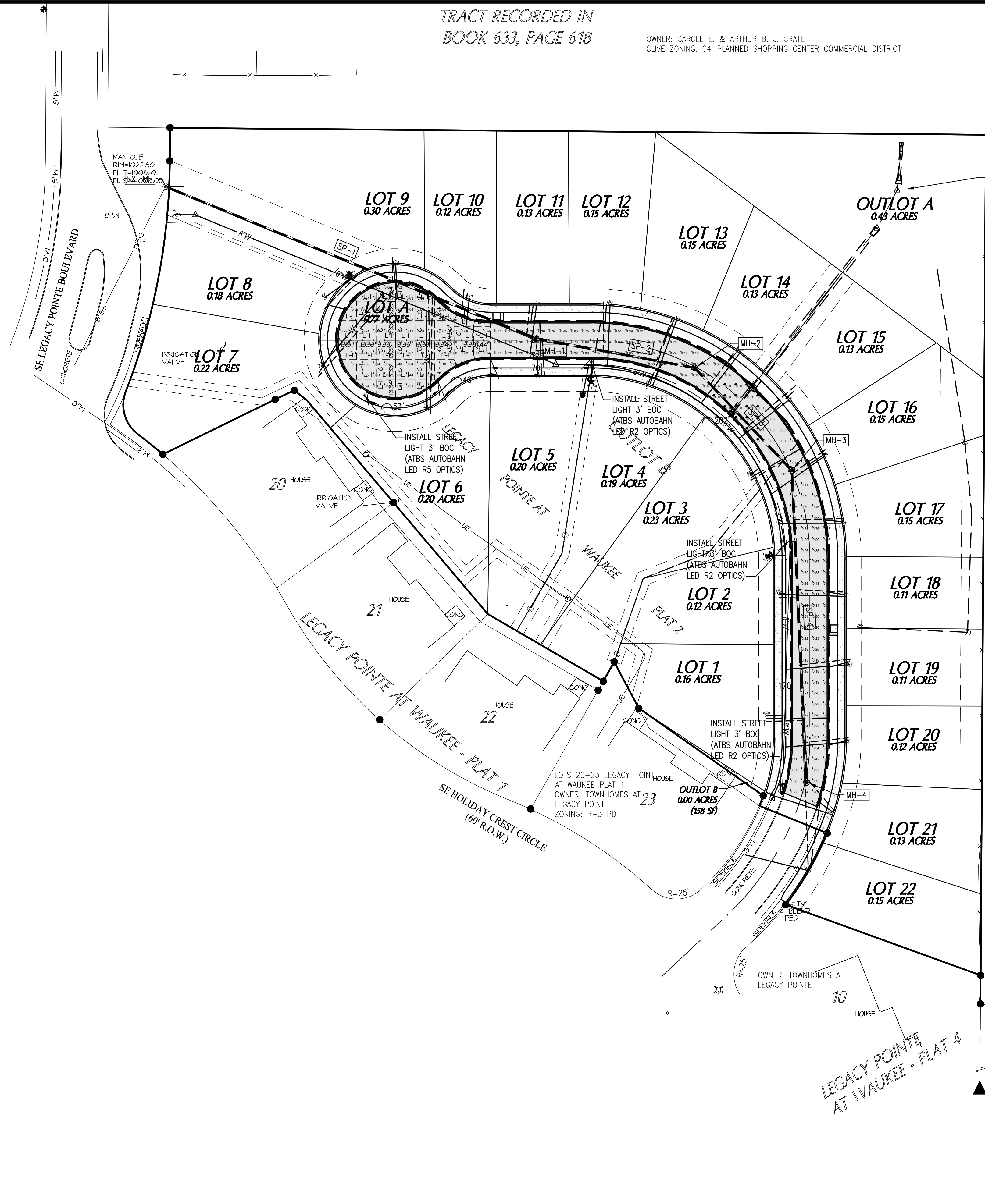
SHEET NO.:  
**W.01**



TRACT RECORDED IN  
BOOK 633, PAGE 618

OWNER: CAROLE E. & ARTHUR B. J. CRATE  
CLIVE ZONING: C4-PLANNED SHOPPING CENTER COMMERCIAL DISTRICT

OWNER: MYERS PROPERTIES, INC.  
CLIVE ZONING: C4-PLANNED SHOPPING CENTER COMMERCIAL DISTRICT



INSTALL OUTLET PROTECTION

COUNTRY CLUB VILLAS CONDOS  
OWNER: COUNTRY CLUB VILLAS HOMEOWNERS  
CLIVE ZONING: R3-MULTIPLE FAMILY RESIDENCE DISTRICT

**GARDEN & ASSOCIATES, LTD.**  
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1701 3rd Avenue East, Suite 1  
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800.491.2524 Iowa Toll Free

**LEGACY POINTE AT WAUKEE  
PLAT 8  
WAUKEE, IOWA**  
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SHEET TITLE  
**STREET LIGHT LAYOUT**

SCALE: 1"=40'  
FIELD BOOK: 54-B  
DRAWN BY: TRH  
APPROVED: EVR

REVISIONS:

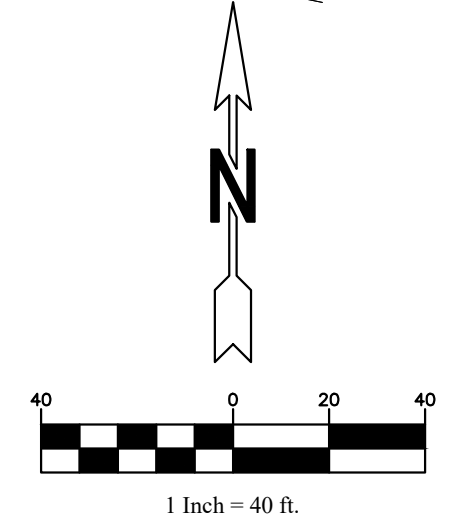
DATE: SEPT. 12, 2017

PROJECT NO.: 7016107

SHEET NO.: **LIGHTING**



Designer  
**Ron Feigl, LC**  
Date  
**8/21/2017**



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