

Vicinity Map

WATER DISTRIBUTION SYSTEM

to serve

THE COURSE AT GREEN VALLEY GREENS 12TH

ADDITION

CITY OF ANDOVER, KANSAS

Gary Janzen, P.E. City Engineer

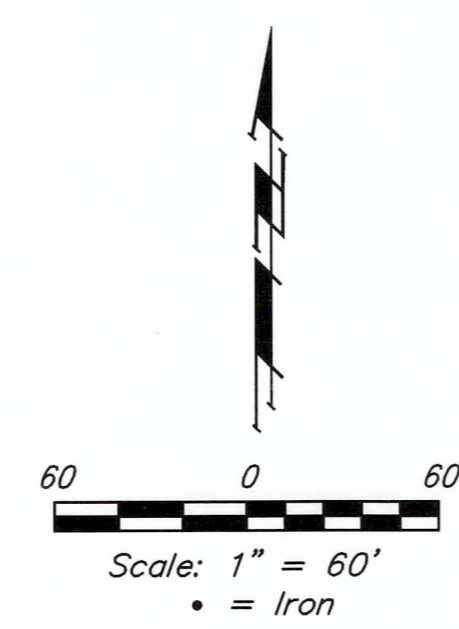
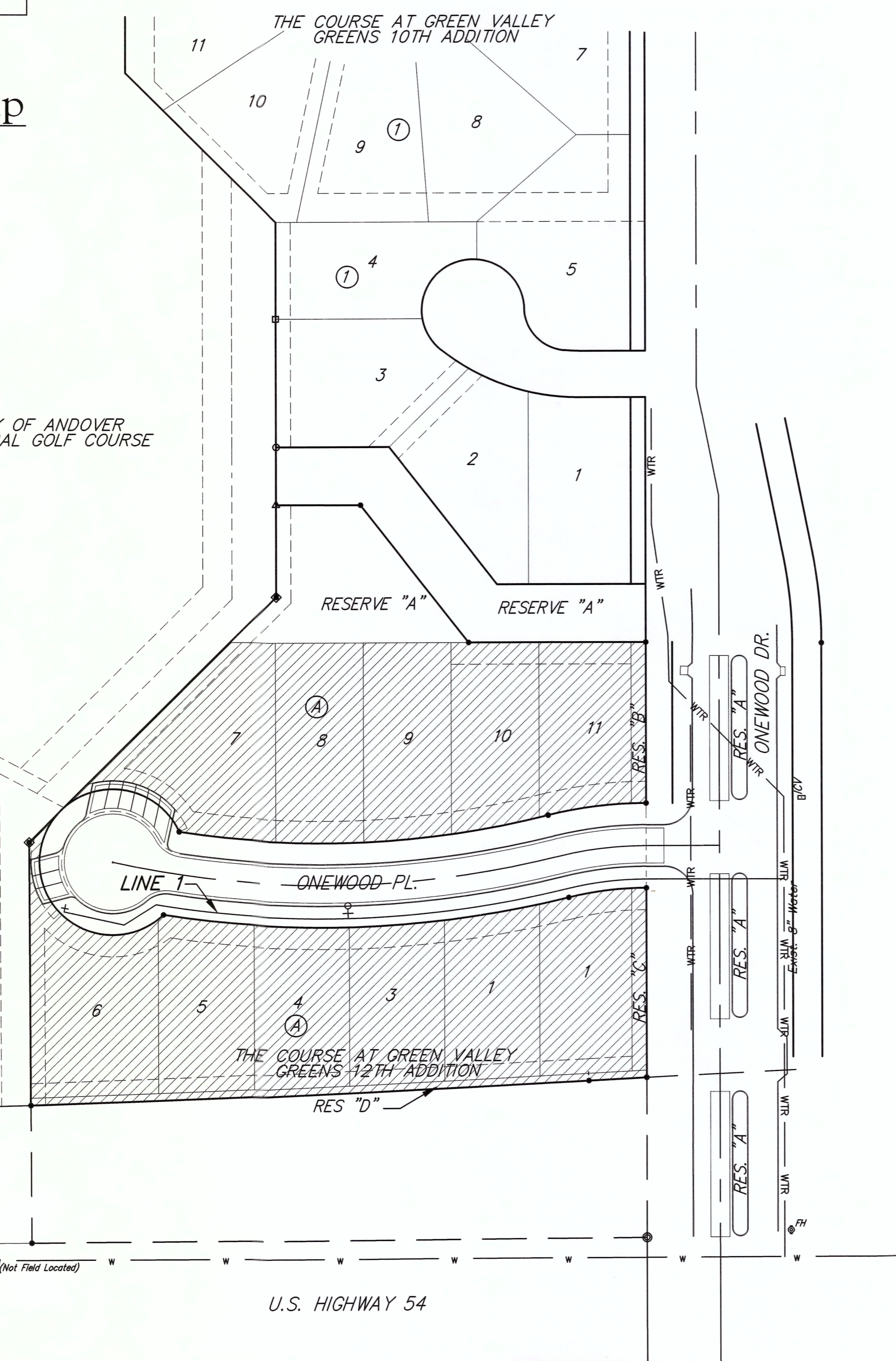
Project Number

1987 PPW (607853)

AS BUILT PLANS

Contractor: Mies Const.
Inspector: Fred Smith, Baughman Co.
pdf's by: KEK, 8/26/16

Clow Fire Hydrants
Clow Valves
North American Restrained Pipe



BENCHMARK

BM #1: RAILROAD SPIKE IN THE NORTH FACE OF POWER POLE 117.6' SOUTH & 47.8' WEST OF THE SOUTHEAST CORNER, RESERVE "B". ELEV. = 1321.39 NAVD88

BM #2: SQUARE CUT TOP OF CURB, SOUTHWEST CORNER OF CURB RETURN, EAST CURB ONEWOOD DR. ELEV. = 1316.55 NAVD88

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GENERAL NOTES:

- The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.
- Contractor will be required to provide notice to utility companies a minimum of forty-eight (48) hours prior to any excavation, as follows:
Kansas One-Call 687-2470
The Contractor must notify the following in case of an emergency:
Cox Communications 262-4270
Kansas Gas Service 1-888-482-4950
Westar Energy 383-8650
Black Hills Energy 1-800-303-0357
AT&T 268-2245
City of Wichita Water 1-316-268-4555
City of Andover Public Works 733-1303
Conoco Phillips Pipeline Co. 1-877-267-2290
Southern Star Pipeline Co. 529-6600
Kinder-Morgan Pipeline Co. 1-888-844-5658
- Utility service lines, poles etcetera are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
- Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations, in the opinion of the Engineer, that will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.
- Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor ONLY with the Developer or Baughman Company approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.
- The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.
- The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed Land Surveyor in accordance with state laws.
- The Water Distribution Division shall field location water valves one time during construction when requested by the Contractor. It shall be the Contractor's responsibility to preserve such field locations during the construction process. Water valves, valve boxes or fire hydrants damaged during construction shall be repaired by Contractor at his own expense. Valve boxes and water meters within the project limits shall be adjusted to match field grades.
- The Contractor shall notify the consultant engineer and Tom Mason with the City at 316-268-4574 with the anticipated construction start date and notify them of project completion. Staking and inspection for this project will be responsibility of the Contractor.
- If traffic will be impacted by construction, a traffic control plan must be submitted and approved by the City Traffic Engineer, Brain Coon at traffic@wichita.gov before construction can begin. The Contractor shall be responsible for all traffic control measures to facilitate construction. All construction zone markings and signage shall conform to the latest version of the Manual on Uniform Traffic Control Devices (MUTCD) as published by the US Dept. of Transportation, Federal Highway Administration. All costs associated with construction markings and signage shall be the Contractors responsibility.
- All elevations shown are NAVD 88.
- All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions.
- All existing and proposed erosion control measures including silt fencing, erosion control mat, straw bales, inlet barriers, and consist. entrance shall be maintained throughout construction by the Contractor and until project is accepted by the City of Andover. The on-site Engineer shall complete weekly reports on the status of erosion control measures. The Contractor shall be required to comply with maintenance and/or replacement of erosion control measures as determined by the on-site Engineer until project is accepted by City of Andover. Maintenance and/or replacement of erosion control measures to be paid by L.S. bid item "Site Clearing & Restoration."
- All excess excavation shall remain on-site and shall be stockpiled or spread at a location determined by the engineer.
- The Contractor shall adjust water valve boxes and fire hydrants as directed by the Engineer at the price bid for said adjustments. The Water Department shall field locate water valves one time during construction when requested by Contractor. It shall be the Contractor's responsibility to preserve such field locations during the construction process. Water valves, valve boxes or fire hydrants damaged during construction shall be repaired by the Contractor at his own expense.
- Opening and closing of water valves shall be done slowly to prevent damage to the water distribution system from water hammer. All valves closed by the contractor must be reopened as new construction permits. Project inspector must ascertain that any valve closed by the operate water valves only when the project inspector assigned to the project is present.
- Unless noted otherwise, all areas disturbed during construction shall be seeded at 300 lbs/ acre with Rye Grass immediately following construction in that area. Contractor shall prepare ground per City Specifications.
- Baughman Company will provide staking information at the time of construction. Contractor to give 72 hours notice for construction staking.
- All necessary protective fill shall be subsidiary to the appropriate bid item associated with the size of pipe being constructed and shall be bid as such.
- Contractor will be required to dispose of any material excavated or disturbed by his operations as necessary for the construction of the project as designed, as directed by the Engineer. The Engineer may request or allow the Contractor to use the material for compacted fill or approve or allow the stockpiling of the material adjacent to the work. In all cases, the material must remain within the limits of the railbanked right of way, and must not be removed to another location.
- The developer for this project is Jay W. Russell PH# (316) 722-2417.

APPROVED AS NOTED
BY WICHITA PUBLIC WORKS
ENGINEERING DIVISION
& BY ANDOVER FIRE DEPARTMENT

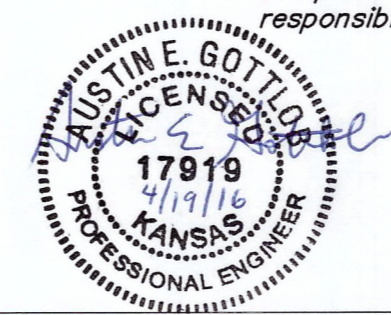
Engineering Rebecca Ziel 4/21/2016
Utilities Dug Foley 4-21-16
Fire Dept. Andover Fire Approval 4/21/2016

NOTE TO CONTRACTORS

Public Property:
Inspection and testing for the waterline is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection is to be in accordance with the City of Wichita standard construction engineering practices and certified by a Professional Engineer Licensed in the state of Kansas. No work shall be performed in dedicated easements or public right-of-way by the Contractor without such inspection nor shall any work be commenced without written authorization by City Engineering. All Construction and Materials shall comply with the City of Wichita Specifications and Standards and Special Provisions (on file and available in the City Engineer's Office) or on the City's Website.

Private Property:
Installation and testing for the fire protection line is to be performed by a City of Wichita licensed fire protection contractor in accordance with the fire codes as adopted by the City of Wichita. All material and construction practices for the fire protection line shall comply with the fire codes as adopted by the City of Wichita (available from the City of Wichita Fire Department). The Contractor shall not commence work without notification and approval of the Wichita Fire Department. Inspection of the fire protection line is to be provided by a licensed Engineering Firm under contract with the Owner/Developer and the Fire Department. The contractor shall not start work until the project inspector is assigned to the project and present on the site. Any work done without inspection will be required to be uncovered for inspection.

An approved copy of these plans signed by City staff are required on-site.



Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

BENCHMARK
 BM #1: RAILROAD SPIKE IN NORTH FACE OF POWER POLE, 117.6' S.OUTH & 47.8' WEST OF THE SE CORNER, RESERVE "B". ELEVATION = 1321.39 NAVD88

BM #2: SQUARE CUT TOP OF CURB, SOUTHWEST CORNER OF CURB RETURN, EAST CURB ONEWOOD DR. ELEV. = 1316.55 NAVD88

23' S of CL Onewood PL, 44' E of CL Onewood Dr.

WL Sta. 0+00.00, Begin Line 1
 BL Sta. -0+43.91, 23.07' Lt.
 8"x8" tap into and connect to existing water line. Tap to be completed by City of Wichita. Contractor to reimburse city for work and set final valve box elevation.
 Valve Box Elev. = 1317.80

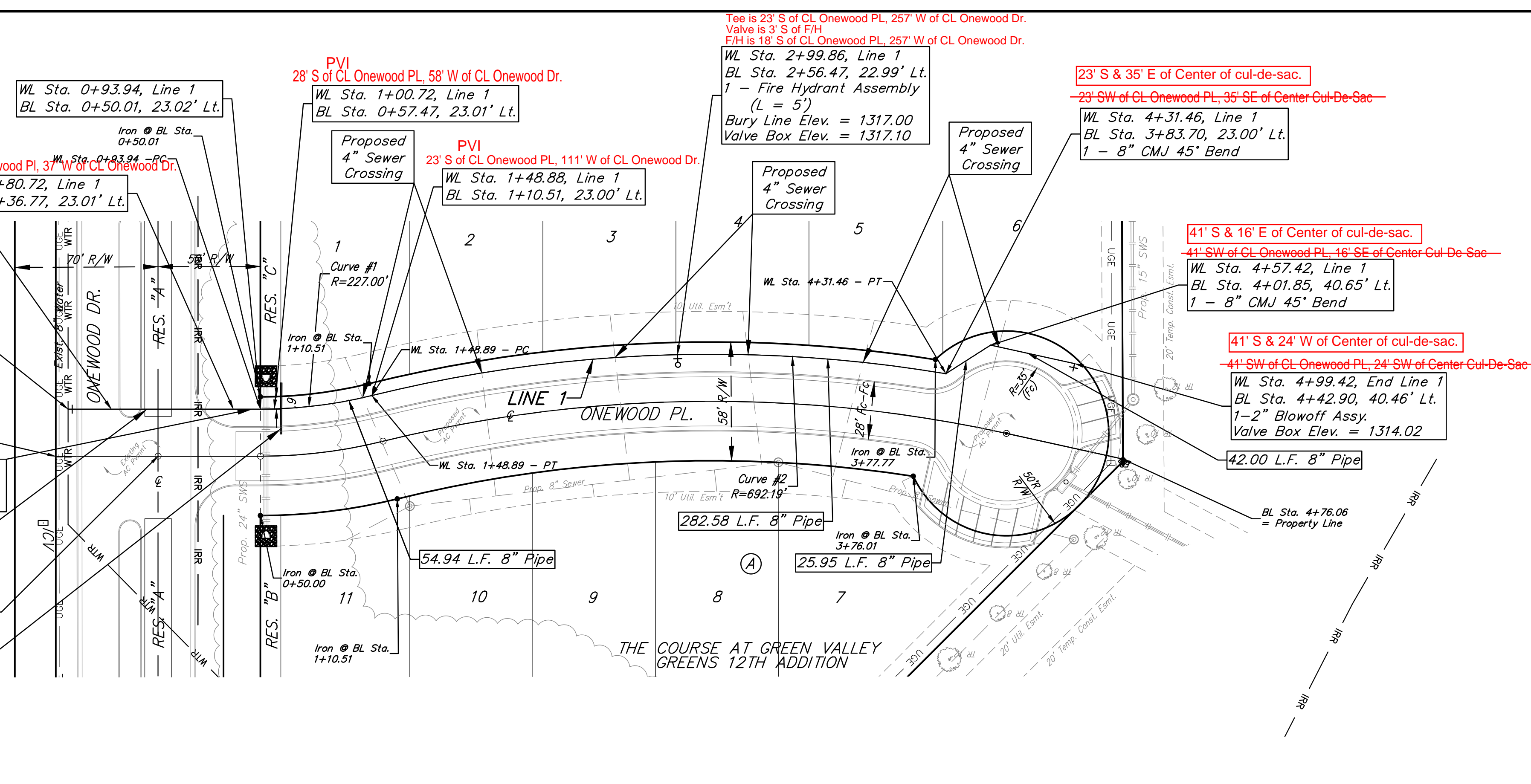
BL Sta. -0+49.95 = Property Line

Proposed 24" SWS Crossing

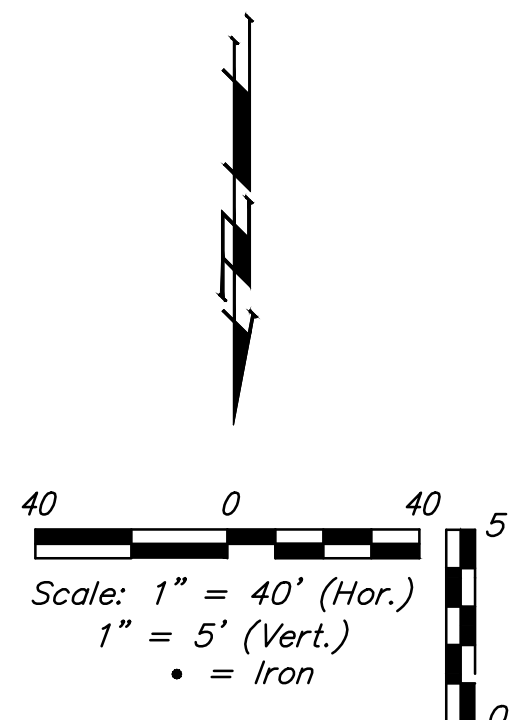
Install 80 L.F. of 8" pipe by directional boring method using 8" Restrained Joint PVC pipe.

BL Sta. 0+00.00 = CL Onewood Ct.

Install temporary 8" PVC culvert (approx. 25' length) in bottom of existing ditch through protective fill to avoid standing water upstream of protective fill. Cost to be incidental to water line pipe.



BL 1 = \varnothing Onewood Ct.



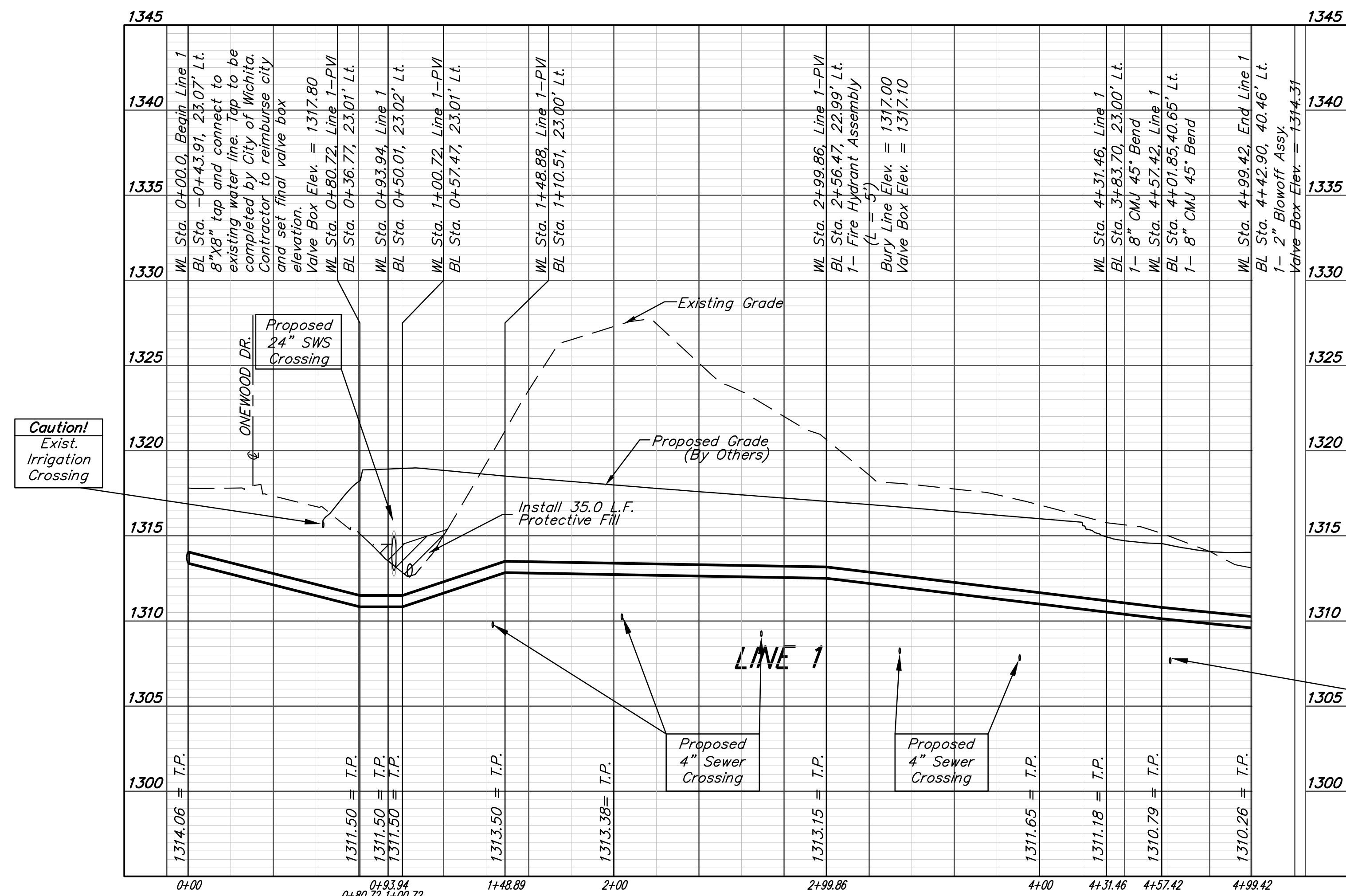
FIRE HYDRANTS REQUIRED					
LINE	STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
1	2+99.86	1317.00	1313.15	4.5'	-

Curve #1
 Curve Data Based on Centerline of Pipe
 Rad. = 227' Delta = 1332'03" Tangent = 27.61'
 Arc = 54.95' L.C. = 54.81' Def./Ft. = 7.57097 Min.

Station	Arc	8' Right	Defl.	Total Defl.
0+93.94	-	-	0'00"00"	0'00"00"
1+00.00	6.06'	5.07'	0'45"53"	0'45"53"
1+25.00	25.00'	20.91'	3'09"16"	3'55"09"
1+48.89	23.89'	19.98'	3'00"52"	6'56"01"

Curve #2
 Curve Data Based on Centerline of Pipe
 Rad. = 692.19' Delta = 232'25" Tangent = 143.28'
 Arc = 282.57' L.C. = 280.62' Def./Ft. = 2.48331 Min.

Station	Chord			Total Defl.
	Arc	8' Left	Defl.	
1+48.89	-	-	0'00"00"	0'00"00"
1+50.00	1.11'	1.05'	0'02"45"	0'02"45"
1+75.00	25.00'	23.66'	1'02"05"	1'04"50"
2+00.00	25.00'	23.66'	1'02"05"	2'06"55"
2+25.00	25.00'	23.66'	1'02"05"	3'09"00"
2+50.00	25.00'	23.66'	1'02"05"	4'11"05"
2+75.00	25.00'	23.66'	1'02"05"	5'13"10"
3+00.00	25.00'	23.66'	1'02"05"	6'15"15"
3+25.00	25.00'	23.66'	1'02"05"	7'17"20"
3+50.00	25.00'	23.66'	1'02"05"	8'19"25"
3+75.00	25.00'	23.66'	1'02"05"	9'21"30"
4+00.00	25.00'	23.66'	1'02"05"	10'23"35"
4+25.00	25.00'	23.66'	1'02"05"	11'25"40"
4+31.46	6.46'	6.11'	0'16"03"	11'41"43"



Caution! Exist. Irrigation Crossing

Proposed 4" Sewer Crossing



Baughman The Course at Green Valley Greens 12th Addition
LINE 1
 Water Distribution System

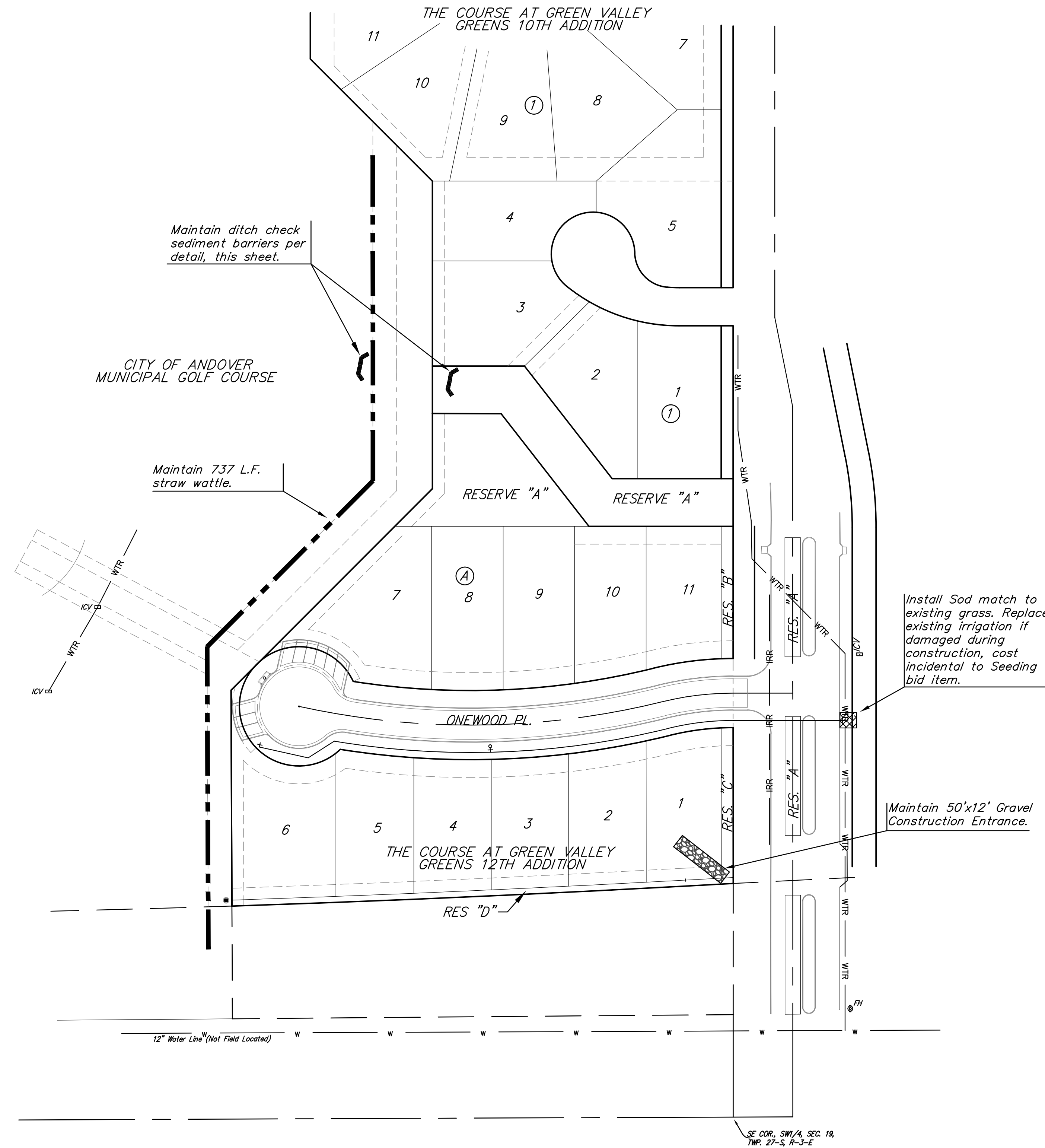
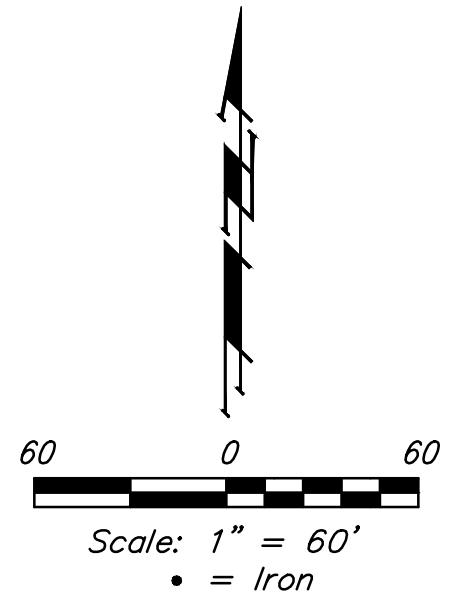
Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

PROJECT NUMBER: _____ DESIGN STAFF: DJL
 REVISIONS: _____ APPROVED: _____ DATE: 1/16
 SCALE: Noted
 SHEET: **4 OF 12**

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BENCHMARK
 BM #1: RAILROAD SPIKE IN NORTH FACE OF POWER POLE, 117.6' S.OUTH & 47.8' WEST OF THE SE CORNER, RESERVE "B". ELEVATION = 1321.39 NAVD88

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Maintain ditch check sediment barriers per detail, this sheet.

CITY OF ANDOVER MUNICIPAL GOLF COURSE

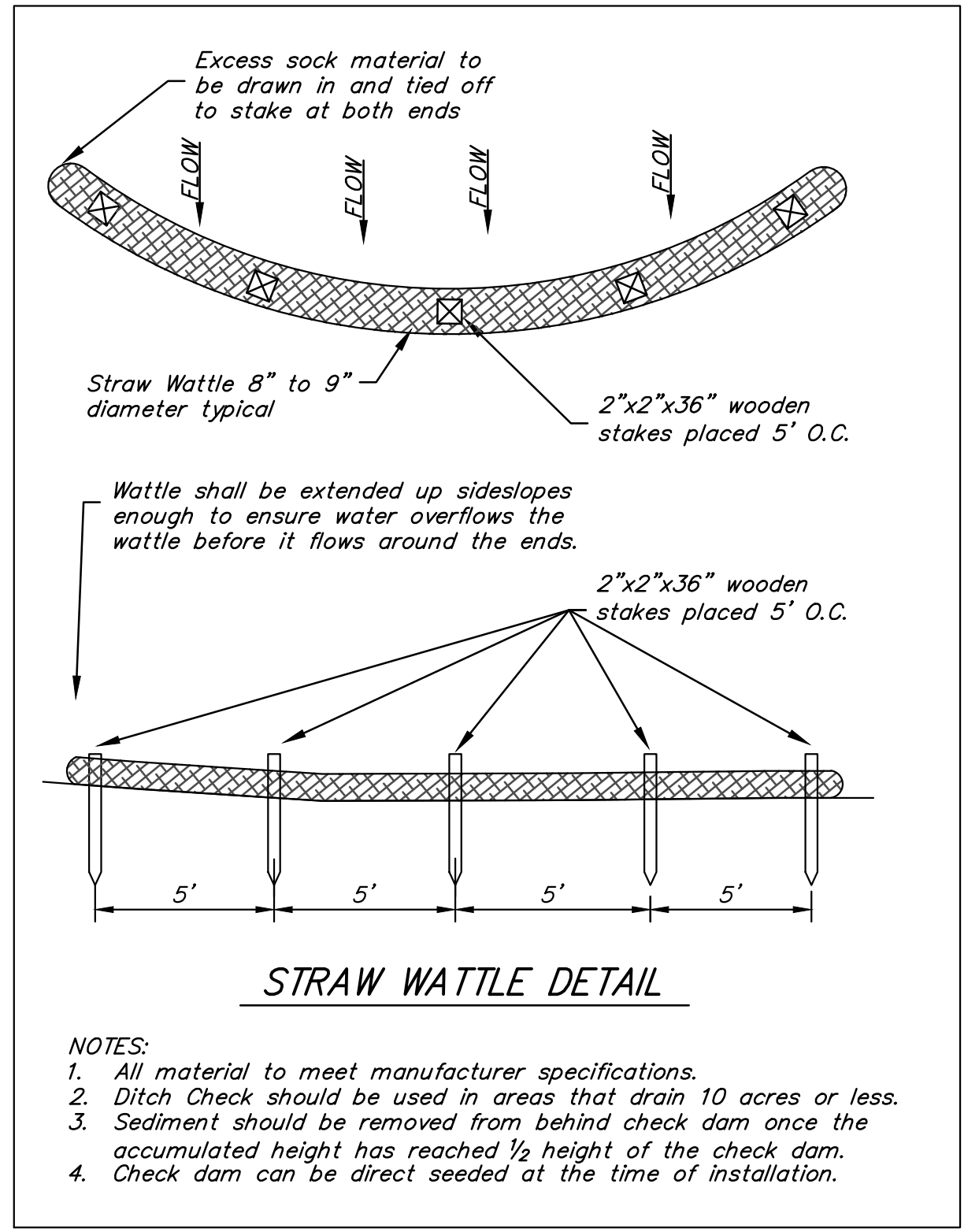
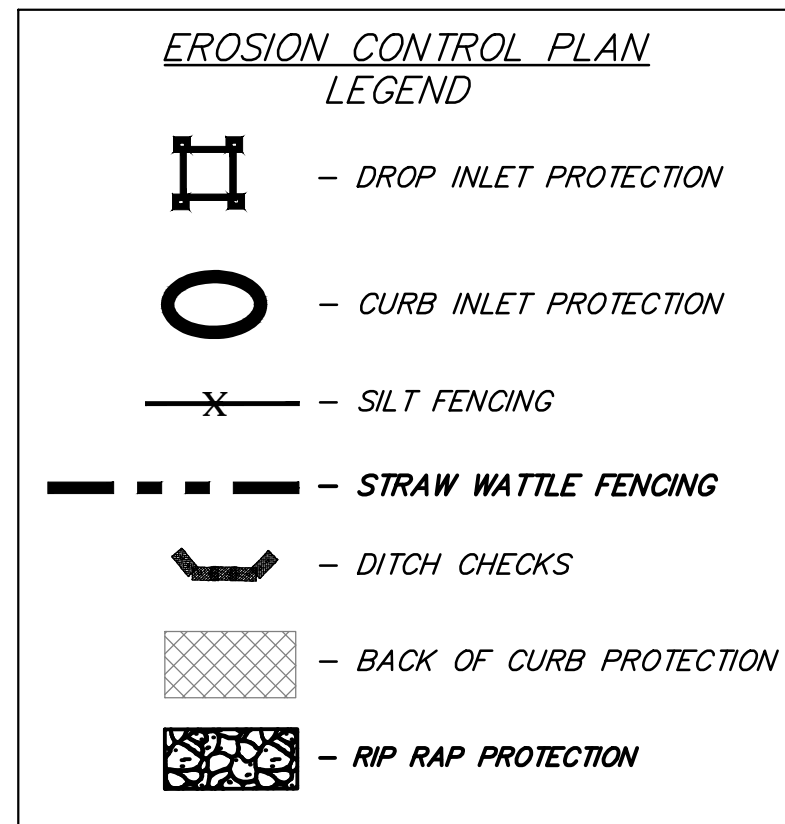
Maintain 737 L.F. straw wattle.

Install Sod match to existing grass. Replace existing irrigation if damaged during construction, cost incidental to Seeding bid item.

Maintain 50'x12' Gravel Construction Entrance.

12" Water Line (Not Field Located)

SE COR. SW 1/4, SEC. 19, TWP. 27-S, R-3-E



NOTES:
 Contractor shall make sure all erosion control is in place before project is accepted. This plan represents the minimum standard. Any additional erosion control measures shall be installed by the Contractor as needed.

All areas disturbed during construction shall be temporary seeded with annual rye (5lbs/1000 sq. ft.) unless otherwise noted.

EROSION CONTROL MEASURE	INSTALL	MAINTAIN
BACK OF CURB PROTECTION (LF)		1
CONSTRUCTION ENTRANCE (EA)		1
CURB INLET BARRIER (EA)		2
DITCH CHECK (EA)		2
DROP INLET PROTECTION (EA)		2
SILT FENCE (LF)		2
SOD (LS)	1	
STRAW WATTLE (LF)	737	
STRAW WATTLE DITCH CHECK (EA)		
MAINTAIN EROSION CONTROL BMP'S (LS)		
RIP-RAP PROTECTION (SY)		

* ALL EXISTING BMP'S INCLUDING CONSTRUCTION ENTRANCE, SEDIMENT BARRIERS, SILT FENCE, CUT-OFF TRENCH, AND EROSION CONTROL MAT SHALL BE MAINTAINED AND REPAIRED IF NECESSARY.



Baughman The Course at Green Valley Greens 12th Addition
EROSION CONTROL
 Water Distribution System

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 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

PROJECT NUMBER	DESIGN STAFF	DRAWN
		DJL
REVISIONS:	APPROVED	DATE
		1/16
	SCALE	
	Noted	
	SHEET	

5 OF 12

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