

### SUBVEYOR'S CERTIFICATE

### LEGAL DESCRIPTION

A PARCEL OF LAND SITUATED IN THE NORTHWEST QUARTER OF SECTION 22.1.7% R.TE. OF THE SALT LANE BASE AND MERIDIAN, EDEN, WEBER COUNTY, STATE OF UTAH, AND SEMS MORE PARTICULARLY DESCRIBED A FOLLOWS BASIS OF BEADING

DASIS OF EXHBRUS.
THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 22 T./N, R. IE. OF THE SALT LAKE BASE AND MERIDIAN. MONUMENTED ON THE SOUTH BY A 3° BRASE 2AP. STAMPED MEBER COUNTY, AND ON THE INFRITE PAY 3° BRASE OF STAMPED WEBER TOWNERS.

FOR A 5° BRASE AS STAMPED WEBER COUNTY, AND SO CONSIDERED TO BEAR MOTO STORP.

COMMENCING AT THE WEST QUARTER CORNER OF SAID SECTION 32. THENCE ND0\*2014"E ALONG THE WEST LINE OF SAID SECTION A DISTANCE OF 1648 70 FEET TO THE POINT OF BEGINNING. THENCE NOT/2017 EALONG THE WEST LINE OF SAID SECTION A DISTANCE OF 454.48 FEET TO A NON-TANGEN CURVE

THENCE ALONG SAID CURVE TO THE RIGHT WHOSE CENTER BEARS S18"20'50"E. HAVING A RADIUS OF 145C00 FEET, A CENTRAL ANGLE OF 20"25'23" AND A LENGTH OF \$20.84 FEET.

THENCE SR7°54'37'E. A DISTANCE OF 302.48 FEET TO A POINT ON THE WEST LINE OF THE FAIRWAYS AT WOLF CREEK PRUD PHASE 1, AMENDED.

THENCE S03°20'S3'W. A DISTANCE OF 166.90 FEET ALONG THE WEST LINE OF SAID FARWAYS AT WOLF CREEK TO A NON-TRANSENT CURVE,

THENCE ALONG SAID CURVE TO THE LEFT WHOSE CENTER BEARS \$33\*2056\*W HAVING A RADIUS OF 168.00 FEET, A CENTRAL ANGLE OF 71\*59'S4" AND A LENGTH OF 211.11 FEET.

THENCE \$21\*21'04'W A DISTANCE OF 309 39 FEET

THENCE \$34\*43'01'W. A DISTANCE OF 121.50 FEET

THENCE \$55°14.14"W & DISTANCE OF 191.85 FEET THENCE N53\*09/24"W A DISTANCE OF 159.59 FEET

THENCE NEGROS ANY A DISTANCE OF 60 00 EFET

THENCE NS6"49'08'W, A DISTANCE OF 164.53 FEET TO THE POINT OF BEGINNING

CONTAINING 411,555SQUARE FEET, OR 9.45 ACRES MORE OR LESS.

NOTARY PUBLIC

WE. THE UNDERSIGNED OWNERS OF THE HEREON DESCRIBED TRACT OF LAND HEREBY SET APART AND SUBDIVIDE THE SAME INTO LOTS AND STREETS AS SHOWN ON THIS PLAT AND NAME SAID TRACT.

### THE FAIRWAYS AT WOLF CREEK P.R.U.D., PHASE 4

SIGNED THIS THE \_\_\_\_\_\_ DAY OF\_\_\_\_

EDEN VILLAGE LLC RUSS WATTS, MANAC	GING MEMBER		
ACKNOWLEDGME STATE OF UTA		) ) 55	
	EBER	) 55	
COUNTY OF W			
COUNTY OF W	DAY OF	. 2016	

# THE FAIRWAYS AT WOLF CREEK P.R.U.D. PHASE 4

A PORTION OF THE NORTHWEST QUARTER OF SECTION 22 TOWNSHIP 7 NORTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN EDEN. COUNTY OF WEBER, STATE OF UTAL

DEVELOPER EDEN VILLAGE LLC SALT LAKE CITY UT 84117

# AN OPERATION SUBJECT TO THAT CERTAIN DECLARATION OF CONTAINTS COURTINGS EASINED. AN OPERSTRICTIONS OF THE COLORATION (SECURITIES BY SECURITIES ENVIRONMENT). THAT HAS BEEN RECORDED IN THE OFFICE OF THE WIEDER COUNTY RECORDER WHICH SETS FORTHITHER ESTRICTIONS AND GENERAL PLAN OF MEMORYMENT FOR THE PROPERTY DESCRIBED IN THIS PLAT CERTAIN TEXAIN NOT OTHERWISE DEPINED IN THIS PLAT CERTAIN TEXAIN NOT OTHERWISE DEPINED IN THIS PLAT SHALL HAVE THE MEMPINGS SET FORTHITHER COLORATION.

UNLESS OTHERWISE DIMENSIONED ON THIS PLAT, SETEACKS FOR THIS SUBDIVISA FOLLOWS: FRONT# 20 FEET, REAR# 20 FEET, SIDE# 9 FEET, SIDE# ACRING STREET ON COR

FORTHIST THE DECLARATION.

PURSUANT TO THE DECLARATION THE

OWNERS ASSOCIATION FIG. A

UTAH HOMPROFIT CORPORATION FLOMMARY ASSOCIATION, IN RESPONDING FOR MATRIANG ALL

COMMANTA REAR FAWY AND SHALL HAVE A PERPETUM, NOW-DUCLINGE RESIDENT OWNERSHALL

PARCELS FOR SUCH MAINTENANCE PURPOSES AS FURTHER DESCRIBED NITHE DECLARATION AS

A THE PROPERTY AS DEPLICED ON THIS PLAT IS SUBJECT TO THE ROOMS OF DECLARATION AS

DESCRIBED IN THE DECLARATION AND DECLARATION HAVE THE ROOM TO DECRABE ANY

APPLICABLE ROWITS PROVIDED THERM INCLIDED, MITHOUT MATRIADIX RESERVATION AD CRATING AND

OF CHITAIN DESCRIPTION SPECIALISM OF RELOCATION MONORISHING WITHIN ECOMANITY, ADDING

DECLARATION AND ADDING SUCH PROPERTIES (LEP PARM PERCADION AND OWNERS AND DECLARATION AND DESCRIPTION FOR COMMINION SUCH PROPERTIES THE PRO

THIS SURVEY AND SUBSECUENT SUBDIVISION PLAT WERE COMPLETED AT THE REQUEST OF THE FEDEN VILLAGE LLC\* FRO THE PURPOSE OF SUBDIVIDING THEIR PROPERTY TO CREATE RESIDENTIAL LOTS.

BASIS OF BEARING.
THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 22. T./NL, R.HE, OF THE SALT LAKE BASE AND,
MERICIAN MONUMENTED ON THE SOUTH BY A 3" BRASS CAP, STAMPED WEBER COUNTY AND ON THE
NORTH BY A 3" BRASS CAP, STAMPED WEBER COUNTY, AND IS CONSIDERED TO BEAR NOW 2014"E.

CURVE TABLE					
CURVE	RADIUS	LENGTH	DELTA	BEARING	CHORD
C1	285.00	106.99	021*30'30*	N82*1455*E	106,36
C2	285.00	249.42	050*08'36*	N46*25'22"E	241,54
C3	510.00	416.50	046*47'29"	N44"44'48"E	405,02
C4	100.00	59.80	034*15'47*	N51*00'39'E	58.91
C5	100.00	60.01	034*2255*	\$84*31'55*E	59.11
C6	285.00	249.42	050*08'36"	N46*25'22"E	241,54
C7	285.00	249,42	050*08'36*	N46*25'22'E	241,54
C8	254.52	96.55	021*30/30*	N82*13'42'E	94.99
C9	255.00	19.70	004*25'35*	N69*16'53"E	19.70
C10	255.00	124.85	026*03'07*	N53102321E	123.60
C11	255.00	78.62	017"39'55"	N30"11"01"E	78.31
C12	540.00	57.75	006*07'40*	N24*2454'E	57,73
C13	540.00	110.86	011"45'45"	N33*21'37"E	110,66
C14	540.00	86.01	009*0732*	N43*48*15*E	85.92
C15	540,00	85.71	009*05'38*	N52*5450*E	85,62
C16	540,00	100,67	010*40'54"	N52*48'06'E	100.53
C17	70.00	40.27	032*57:54*	N51*3936*E	39.72
C18	130,00	67,45	029*43'35*	N48*0239'E	66.69
C19	130.00	11,88	005*14'06*	N65*31'30'E	11.87
C20	480.00	101.53	012"07"11"	N62*04'57"E	101,34
C21	480.00	101.86	012"09'33"	N49*56'35"E	101,67
C22	480.00	104.03	012*25'05*	N37*3917'E	103,83
C23	480.00	84.57	010*05'40*	N26*2354*E	84,46
C24	70.00	42.01	034*2255*	N84*31'55*W	41,38
C25	55.00	7.88	008*1250*	S48*53'08*E	7.88
C26	55.00	68.65	071*30741*	\$57*05*19*W	64.28
C27	55.00	37,06	038,36,36,	N67*51'02*W	36.37
C28	55.00	45.33	047*13'25*	N24*56*02*W	44.06
C29	55.00	50.79	052*54'38*	N25*08'00*E	49.00
C30	55,00	72.40	Q75*25'08*	N89*1753*E	67.28
C31	130.00	10.01	004*2442*	N80*28'59'E	10.01
C32	130.00	61.23	026*5914*	S83*49'03*E	60.67
C33	130.00	6.77	002*58'59*	S68*49'67"E	6.77
C34	315.00	93.52	017*00'36*	N36*0227*E	93,17
C35	315.00	88,77	016*08'46*	N52*3708*E	88.47
C36	315.00	59.39	010*48'09*	N66*05'35"E	59.30
C37	315,00	118.43	021*32'28*	N82*1554'E	117,73
C38	1460.00	57.52	002*15'26*	N89*02'20*W	57.52
C39	1460.00	129.05	005*03*53*	\$87*18'01*W	129.01
C40	1460,00	81.42	003*11'43*	S83"10'13"W	81,41
C41	1460.00	79.27	003*06'40*	\$80*01'02*W	79.26
C42	1460.00	131.80	005*10'20*	\$75*52'32"W	131.75
C43	1460.00	41.77	001"38"22"	S72*28'11*W	41.77
C44	168.00	80.73	027*32'00*	\$79*3456*W	79.96
C45	168.00	78.69	026*50'08*	552*23'52*W	77.97
38.67	200	- 300000			7777

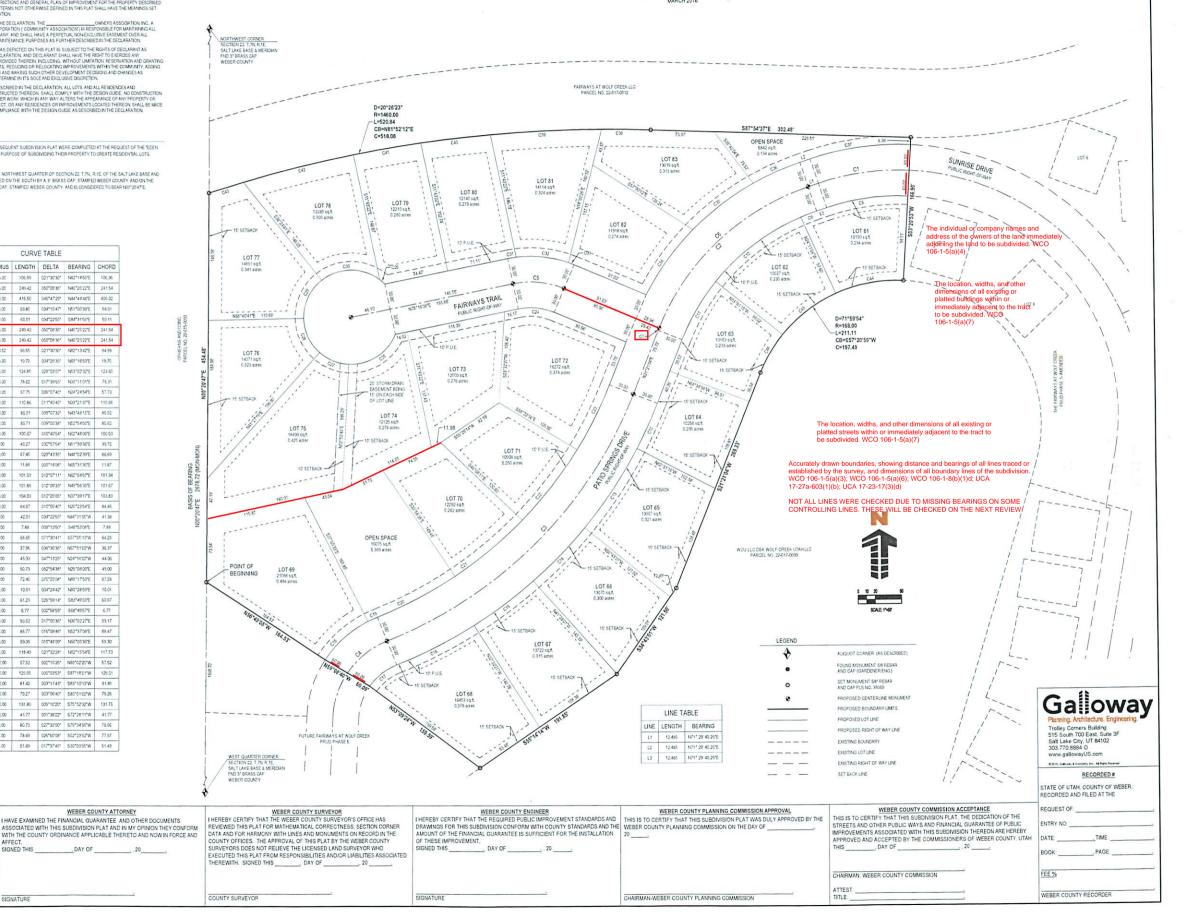
C46 168.00 51.69 017\*37\*45\* \$30\*09\*55\*W 51.49

SIGNATURE

WEBER COUNTY ATTORNEY

# THE FAIRWAYS AT WOLF CREEK P.R.U.D., PHASE 4

A PORTION OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 7 NORTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN EDEN, COUNTY OF WEBER, STATE OF UTAH MARCH 2016





### SURVEYOR'S CERTIFICATE

### LEGAL DESCRIPTION

A PARCEL OF LAND SITUATED IN THE MORTHWEST GUARITER OF SECTION 22 T.PL. R. IE. OF THE SALT LAKE BASE AND MERDIAM EDEN WEBER COUNTY STATE OF UTAH AND BEING MCREE PARTICULARLY DESCREED AS FOLLOWS.

BASE OF BEARMS.

THE WEST LIKE OF THE WORTHWEST GUARITER OF SECTION 22 T.PL. R. IE. OF THE SALT LIKE BASE AND MERDIAM MONAMENTED ON THE SOUTHER A 2 BRASS CAP STAMPED RESERVOUNTY, AND ON THE MORTHWEST AS THE SOUTH AND A STAMPED WEBER COUNTY, AND IS CONSIDERED TO BEAR MONTO 47E.

COMMENSION AT THE WEST CHARTER CORNER OF SAID SECTION AS THENCE MOTIVATE ALONG THE WEST WAS CONTINUED OF A CONTINUE OF A CONTINU

WOLF CREEK.

THENCE N99\*1439'W, A DISTANCE OF 73:37 FEET ALONG THE NORTHLINE OF SAID FAIRWAY OAYS AT WOLF CREEK TO THE POINT OF BEGINNING.

CONTAINING 276 979 SQUARE FEET, OR 6.36 ACRES MORE OR LESS.

# OWNERS DEDICATION

WE THE UNDERSIGNED OWNERS OF THE HEREON DESCRIBED TRACT OF LAND, HEREBY SET APART AND SUBDIVIDE THE SAME INTO LOTS AND STREETS AS SHOWN ON THIS PLAT AND NAME SAID.

# THE FAIRWAYS AT WOLF CREEK P.R.U.D., PHASE 5

AND HEREBY GRANT AND DEDICATE A PERPETUAL RIGHT AND EASEMENT OVER, UPON AND UNCER THE LANDS DESIGNATED ON THE PLAT AS PURILD UTILITY, STORM WAITER DETINIOUS PIPODS. DRAINGER AND CANAL MANIFEMANCE ASSEMENTS. THE SAME TO DES LUESPORTS THE PASTILLATION, MANTENANCE, AND OPERATION OF PURILD UTILITY SERVICE LIES STORM DRAINEGE FACURES. RIGHARDING CANALS OF FOR THE PERPETUAL PRESENDATION OF WAITER DRAINEGE CHANGES IN THEIR NATURAL STATE WHOCHEVER IS APPLICABLE AS MAY AUTHORIZED BY MESER COUNTY. UTAN WITH AND ELLIDIOUS OF STREAMURS SERVICE SERVICE WITH HIS DUPLEMENTS.

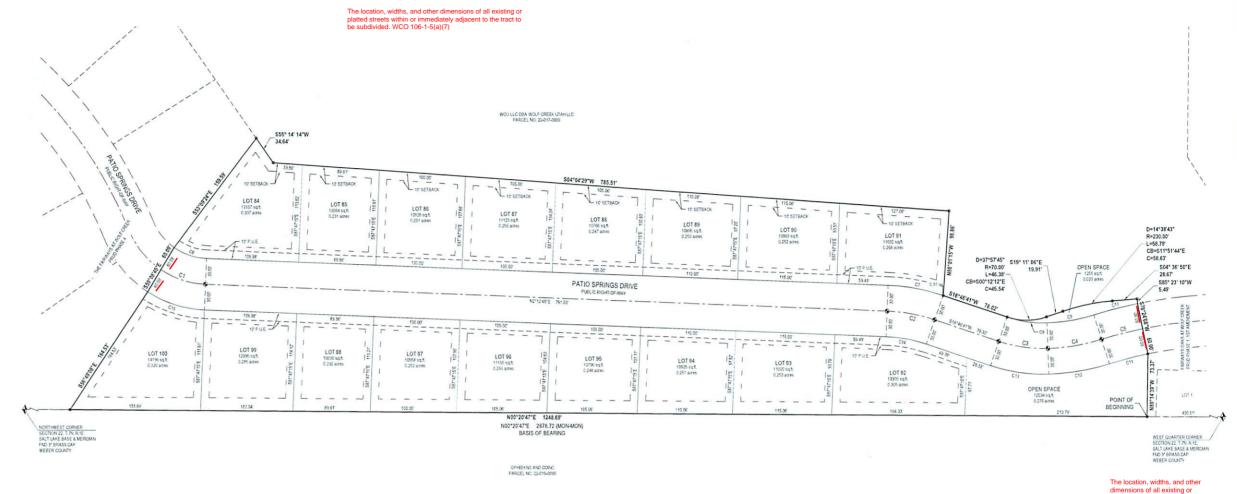
EDEN VILLAGE ILC RUSS WATTS, MANAC	SING MEMBER		
ACKNOWLEDGM	ENT		
STATE OF UTA	н	)	
STATE OF UTA		ss	
		) SS ) .2016	

SAID INSTRUMENT WAS SIGNED IN BEHALF OF SAID LLC. BY A RESOLUTION OF ITS MEMBER
RUSS WATTS ACKNOWLEDGED TO ME THAT SAID LLC. EXECUTED THE SAME.

NOTARY PUBLIC

# THE FAIRWAYS AT WOLF CREEK P.R.U.D., PHASE 5

A PORTION OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 7 NORTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN EDEN, COUNTY OF WEBER, STATE OPUTAH MARCH 2016



PLAT NOTES

1. UNLESS OTHERWISE DIMENSIONED ON THIS PLAT. SETBACKS FOR THIS SUBDIVISION ARE AS FOLLOWS: FRONT= 15 FEET, REAR= 15 FEET, SIDE= 9 FEET, SIDE FACING STREET ON CORNER LOT= 15

3. PLUSIANT OTHE DECLARATION THE \_\_\_\_OWNERS ASSOCIATION INC. A UTAHLORFORT CORPORATION (COMMANTY ASSOCIATION) IN ESPONSILE FOR MINITAMING ALL COMMANTY AREAS, IF MY, AND SHALL HAVE A PERFETUAL MAHEXCLUSIVE EASEMENT OVER ALL PARCELS FOR SUCH MAINTENANCE PURPOSES AS PRINTING DESCRIPED IN THE DECLARATION.

PARCELS FOR SUCH MARKER PURPOSES AS FURTHER EXCENSION TO DECLARATION.

THE PROPERTY AS DEPAIDED ON THIS FLAT IS SUBJECT TO THE ROBING PEQUARMIT AS
DESCRIBED IN THE DECLARATION, AND DECLARANT SHALL HAVE THE FLORT TO EXERCISE ANY
APPLICABLE FLORTS PROVIDED THESEN HICLIONIS, WITHOUT LIMITIATION, DESERVATION AND CONTINUE
OF CRITICAL EASEMENTS, REDUCING OR RELOCATION IMPROVEMENTS WITHEIT THE COMMARTY, ADDING
ADDITIONAL FACILITIES AND MINKING DUCH OTHER DEVIATIONAL OF CRITICAL STATE OF THE PROPERTY OF THE PROPE

5. AS PURTHER DESCRIBED IN THE DECURANTION ALLLOTS, MORAL RESIDENCES AND IMPROVEMENTS CONSTRUCTED THEREOK, SHALL COMEN WITH THE DESIGNACION. OF OMER WORK WHOTH AND HAY HAVE AT LESS THE APPEARMING OF ANY PROPERTY OR LOT MITHIN THE PROJECT OR ANY RESIDENCES OF IMPROVEMENTS LOCATED THEREOK SHALL BE MIDE OR DOES WITHOUT COMPAULANCE WITH THE DESIGNACION AS DESCRIBED THE DECURANTION.

NARRATIVE

THIS SURVEY AND SUBSEQUENT SUBDIVISION PLAT WERE COMPLETED AT THE REQUEST OF THE YELLAGE LLC\* FRO THE PURPOSE OF SUBDIVIDING THEIR PROPERTY TO CREATE RESIDENTIAL LOTS.

SIGNATURE

BASIS OF BEARING
THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 22. T./N. R. HE. OF THE SALT LAKE BASE AND
MERIDIAN MONUMENTED ON THE SOUTH BY A Y BRASS CAP, STAMPED WEBER COUNTY, AND ON THE
NORTH BY A Y BRASS CAP, STAMPED WEBER COUNTY, AND IS CONSIDERED TO BEAR NOO"2014TE.

ALIQUAT CORNER (AS DESCRIBED) PROPOSED CENTERLINE MONUMEN PROPOSED BOUNDARY LIMITS PROPOSED LOT LINE PROPOSED RIGHT OF WAY LINE EXISTING BOUNDARY ----EXISTING LOT LINE EXISTING RIGHT OF WAY LINE

SET BACK LINE



CURVE	RADIUS	LENGTH	DELTA	BEARING	CHORD
C1	100.00	55.27	031"40"01"	\$18"0745"W	54.57
C2	195,00	56.38	016*33'56"	N10*29'43*E	56.18
C3	160,00	57.53	020*36:06*	S08*28'38'W	57.22
C4	230.00	63.31	015*4617*	509*42'34"E	63,11
C5	470.00	49.23	006,00.03	N14*3541*W	49.20
C6	70.00	40.27	032*57:54"	\$18*41'42'W	39.72
C7	225.00	65.05	016"33"56"	N10*2943*E	64.83
CB	130.00	46.74	020*36'06*	S08*28'38'W	46.49
C9	200.00	55.05	015*4617*	909*42'34"E	54.88
C10	500.00	52.37	006*00:03*	N14"35'41"W	5234
C11	440.00	46.09	006"00'05"	N14"35'40"W	46.07
C12	260.00	71.57	015*45*17*	S09*4234*E	71.34
C13	190.00	68.32	020*36'06*	S08*28'38'W	67.95
C14	165,00	47,71	016*33'56*	N10*2943*E	47.54
C15	130.00	70.27	030*58'07*	\$17*41'48'W	69.41

Galloway Planning. Architecture. Engine Trolley Corners Building 515 South 700 East, Suite 3F Salt Lake City, UT 84102 303.770.8884 O www.gallowayUS.com

platted buildings within or mmediately adjacent to the tract

to be subdivided. WCO 106-1-5(a)(7)

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REQUEST OF.\_\_

NTRY NO \_\_\_

WEBER COUNTY ATTORNEY WEBER COUNTY SURVEYOR WEBER COUNTY PLANNING COMMISSION APPROVAL THE FAIRWAYS AT WOLF CREEK P.R.U.D., PHASE 5

SIGNATURE

A PORTION OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 7 NORTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN EDEN. COUNTY OF WEBER, STATE OF UTAH

**EDEN VILLAGE LLC** 

I HAVE EXAMINED THE FINANCIAL GURRANTE AND OTHER DOCUMENTS
ASSOCIATED WITH THIS SUBDIVISION PLAT AND IN MY OPINION THEY CONFORM
WITH THE COUNTY ORDINANCE APPLICABLE THERETO AND NOW IN FORCE AND
AFFECT.
SIGNED THIS \_\_\_\_\_DAY OF \_\_\_\_\_. 20 \_\_\_\_.

I HEREBY CERTIFY THAT THE WEBER COUNTY SURVEYOR'S OFFICE HAS REVIEWED THIS PLAT FOR MATHEMATICAL CORRECTNESS, SECTION CORNER 

COUNTY SURVEYOR

WEBER COUNTY ENGINEER

I HEREBY CERTIFY THAT THE REQUIRED PUBLIC IMPROVEMENT STANDARDS AND DRAWINGS FOR THIS SUBDIVISION CONFORM WITH COUNTY STANDARDS AND THE WEBER COUNTY PLANNING COMMISSION ON THE DAY OF AMOUNT OF THE FINANCIAL GUARANTEE IS SUFFICIENT FOR THE INSTALLATION

20

WEBER COUNTY PLANNING COMMISSION ON THE DAY OF 20

21 OF THESE IMPROVEMENT. . DAY OF

CHAIRMAN-WEBER COUNTY PLANNING COMMISSION

WEBER COUNTY COMMISSION ACCEPTANCE THIS IS TO CERTIFY THAT THIS SUBDIVISION PLAT, THE DEDICATION OF THE STREETS AND OTHER PUBLIC WAYS AND FINANCIAL GUARANTEE OF PUBLIC IMPROVEMENTS ASSOCIATED WITH THIS SUBDIVISION THEREON ARE HEREBY APPROVED AND ACCEPTED BY THE COMMISSIONERS OF WEER COUNTY, UTA

11110	 

ATTEST:

OOK: \_\_\_\_, PAGE: \_\_\_ FEE % WEBER COUNTY RECORDER



# WATTS ENTERPRISES THE FAIRWAYS AT WOLF CREEK P.R.U.D., PHASE 4 & 5 REVIEW PLANS

# PROJECT CONTACTS

WATTS ENTERPRISES 5200 SOUTH HIGHLAND DRIVE, SUITE 101 SALT LAKE CITY, UT #4117 TEL (801) 897-480 CONTACT PICK EVERSON EMAIL RICK@WATTSENTERPRISES.COM

ENGINEER/CONSULTANT
CALLOWAY & COMPANY INC.
915 SOUTH 700 EAST SLITE SF
SALT LAKE CITY IT MATES
TEL. (801) 963-195.
CONTACT FERMY TOONE
EMAIL SEPENYTOONE GALLOWAYUS COM

PLANNER
LANGVARDT DESIGN GROUP
328 WEST 200 SOUTH
SALT LAKE CITY, UT 84102
TEL (801) 583-1296
FAX.

CONTACT ERIC LANGUARDT EMAL -

EAMA. 
LANDSCAPE ARCHITECT

GALLOWAY & COMPANY, INC.
5300 DTC PARKWAY, SUITE 100
GREENWOOD VALAGE COLORADO 80111

FL. (503) 770-884

FAX, (303) 770-3856

CONTACT 
EAMA. -

ALL IRRIGATION PIPE AND FITTINGS ARE TO MEET WOLF CREEK WATER 6 SEWER IMPROVEMENT DISTRICT STANDARDS AND SPECIFICATIONS.

ALL CULINARY WATER PIPE AND FITTINGS IS TO BE C-900 PVC AND MUELLE FITTINGS (TEES, HYDRANTS, VALVES, ETC, UNLESS APPROVED OTHERWISE BY THE ENGINEER.

ALL IRRIGATION LINES ARE REQUIRED TO MAINTAIN A MINIMUM OF 3 OF COVER TO FINISH GRADE.

ALL CULINARY LINES ARE REQUIRED TO MAINTAIN A MINIMIM OF 5 OF COVER TO FINISH GRADE. REFERENCE WOLF CREEK WATER & SEWER IMPROVEMENT DISTRICT (WOWSID) STANDARDS AND SPECIFICATIONS FOR ALL WATER, SEWER, AND SECONDARY IRRIGATION IMPROVEMENTS.

REFERENCE THE LATEST EDITION OF THE APWA (AND ALL AMENDMENTS)

# GEOTECHNICAL ENGINEER

EARTHTEC ENGINEERING 1596 WEST 2850 SOUTH, SLITE 108 OGCEN, UT 84401 TEL (801) 399-9616 FAX (801) 399-9642 CONTACT FRANK NAMDAR EMAIL FNAMDAR@EARTHTECENG.CO

# UTILITY CONTACTS

SECONDARY IRRIGATION
WOLF CREEK WATER & SEAVER MEROVEMENT DISTRICT
SAST MORTH WOULF CREEK DRIVE
EDEN UT 48410
TEL, 8611 745-5445
COMPACT ROB THOMAS GWOVERLOOM

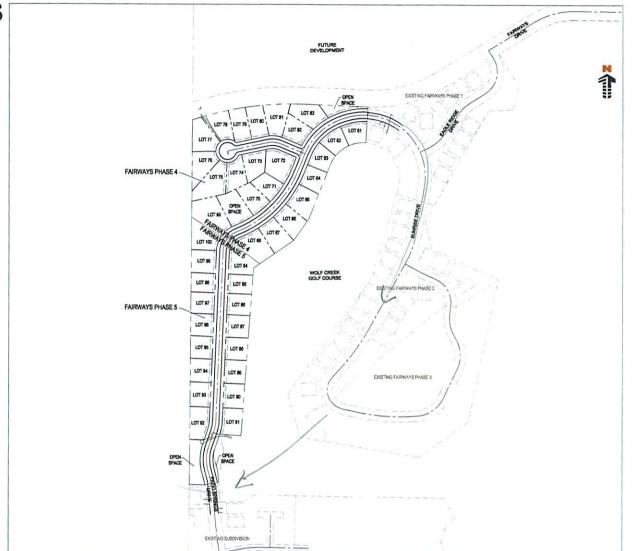
SANITARY SEWER
WOLF CREEK WATER & SEWER IMP
8632 NORTH WOLF CREEK DRIVE
EDEN LIT MASIO
TEL (801) 745-3435
COVITACT ROB THOMAS
EMAIL RIHOMAS@WCWSID.COM

# STORM SEWER

WEBER COUNTY 2380 WASHINGTON BLVD, SUITE 240 OGDEN, UT 84401 TEL, (801) 395-4374 CONTACT, BLAINE FRANDSEN EMAIL, BFRANDSENIGCO, WEBER UT, US

# TELEPHONE CENTURYLINK LOCAL NETWORK

GENERAL CONSTRUCTION NOTES JURISDICTIONAL CONSTRUCTION NOTES



SHEET NUMBER	SHEET TITLE
C0.0	COVER SHEET
1	SUBDIVISION PLAT
SP01	OVERALL SITE PLAN
UTO1	OVERALL UTILITY PLAN
GR01	OVERALL GRADING PLAN
PP01	PLAN & PROFILE - PATIO SPRINGS DRIVE - STA 9+00 TO 15+00
PP02	PLAN & PROFILE - PATIO SPRINGS DRIVE - STA 15+00 TO 20+0
PP03	PLAN & PROFILE - PATIO SPRINGS DRIVE - STA 20+00 TO 25+0
PP04	PLAN & PROFILE - PATIO SPRINGS DRIVE - STA 25+00 TO 31+0
PPO5	PLAN & PROFILE -FAIRWAYS TRAIL - STA 40+00 TO 44+50
E001	EROSION CONTROL PLAN
EC03	EROSION CONTROL PLAN
E003	EROSION CONTROL DETAILS (APWA)
EC04	EROSION CONTROL DETAILS (APWA)
ECC5	EROSION CONTROL DETAILS (APWA)
DT01	SANITARY SEWER DETAILS (APWA)
DT02	SANITARY SEWER DETAILS (APWA)
DT03	WATER DETAILS (WCWSID)
DT04	STORM DRAIN DETAILS (APWA)
DT05	STORM DRAIN DETAILS (APWA)
DT06	STORM DRAIN DETAILS (APWA)

SHEET INDEX

### SITE MAP SCALE: 1"=200"



VICINITY MAP

# BENCHMARK

BENCHMARK, THE SITE BENCHMARK IS THE CENTER OF SECTION 22, TOWNSHIP 7 NORTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, FOLIAD 3: WEBER COUNTY BRASS CAP. ELEVATION - \$334.20\*

NOTE: CONTRACTOR RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY UTILITY DISTRICTS OR ANY OTHER GOVERNING AGENCY.

NOTE: CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTATION. CONTRACTOR SHALL HAVE LICENSED SURVEYOR REPLACE ANY DAMAGED OR DISTURBED MONUMENTATION AT THEIR COST.

# BASIS OF BEARING

# **CAUTION - NOTICE TO CONTRACTOR**

ALL UTILITY LOCATIONS SHOWN ARE EASED ON MAPS PROVIDED BY THE AFFROPRATE UTILITY CORPANY AND FIELD SHAFEAS EVIDENCE AT THE MOY SURPEY AND IS TO BE CONSIDERED AN AFFOLIAME! LOCATION CORY. ITS THE CONTRACT OF SHAFEAS FOR SHAFE TO FIELD VERY THE FIELD LOCATION OF ALL UTILITIES FURING THE UTILITY OF THE LOCATION OF ALL UTILITIES FURING THE UTILITY OF THE LOCATION OF ALL UTILITIES FURING THE OWNER WHEN A PROPERT AND RESOURCES TO THE EXPREZER PROPERTY OF CONSTRUCTION.



Know what's below. Call before you dig.

SHEET TITLE:

Checked By:

C<sub>0.0</sub>

03/14/2016

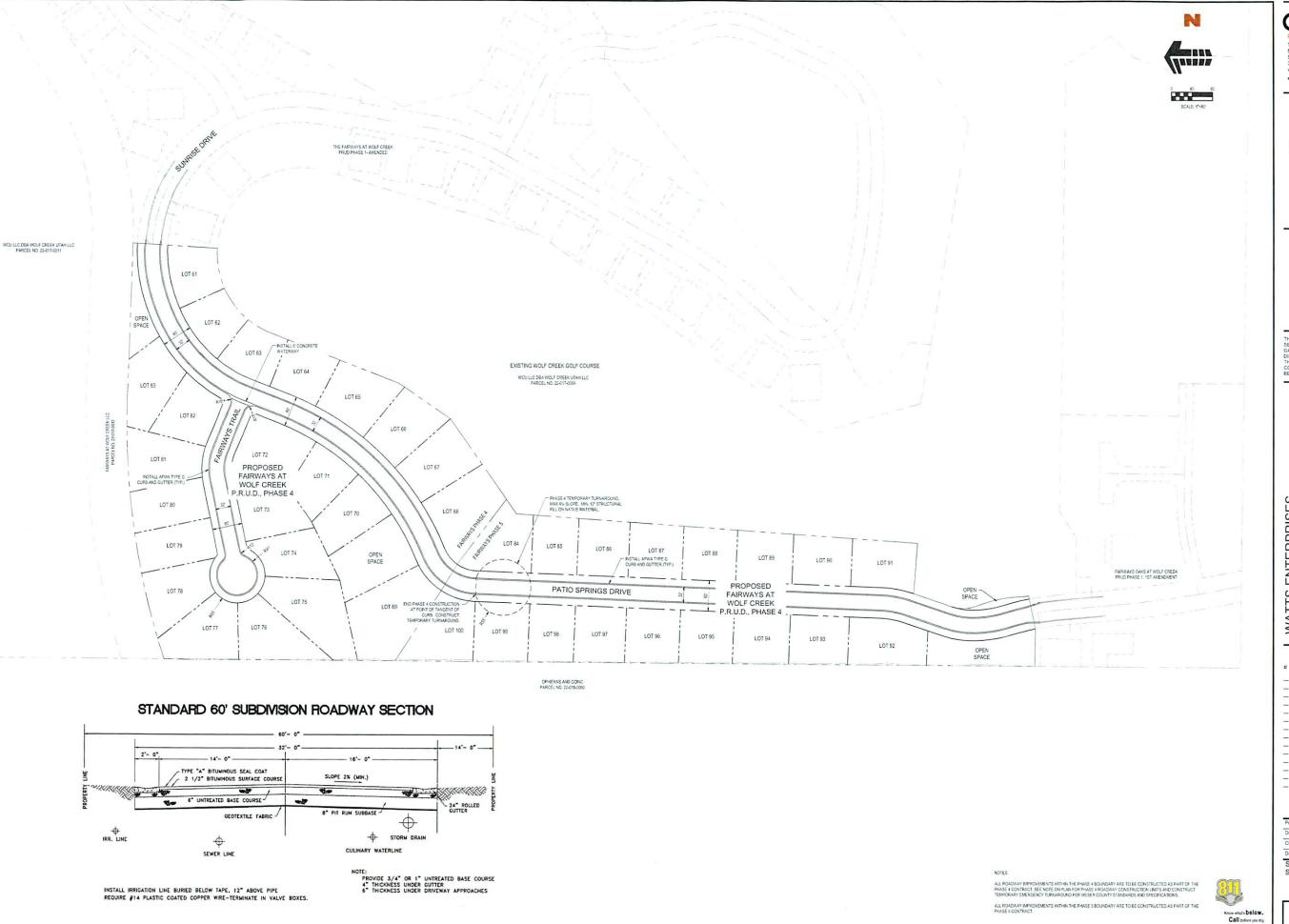
WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5

Galloway

ENTERPRISES

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Planning, Architecture, Engine Trolley Corners Building 515 South 700 East, Sute 3F Salt Lake City, UT 84102 303.770.8884 O www.gallowayUS.com



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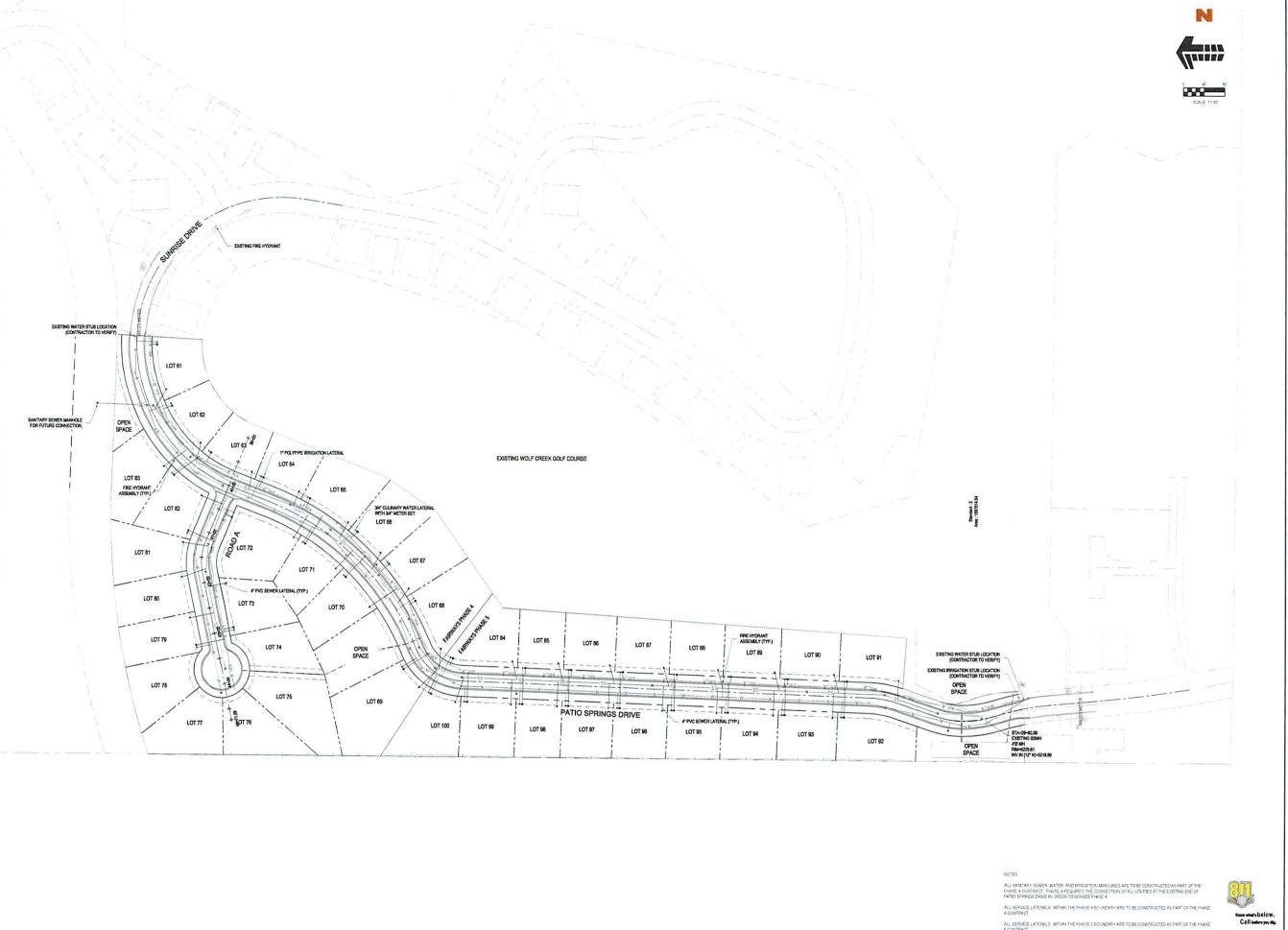
WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5

# Date Issue / Description Init.

Project No:	WAT01.01
Drawn By:	JST
Checked By:	RMP
Date:	03/13/2016

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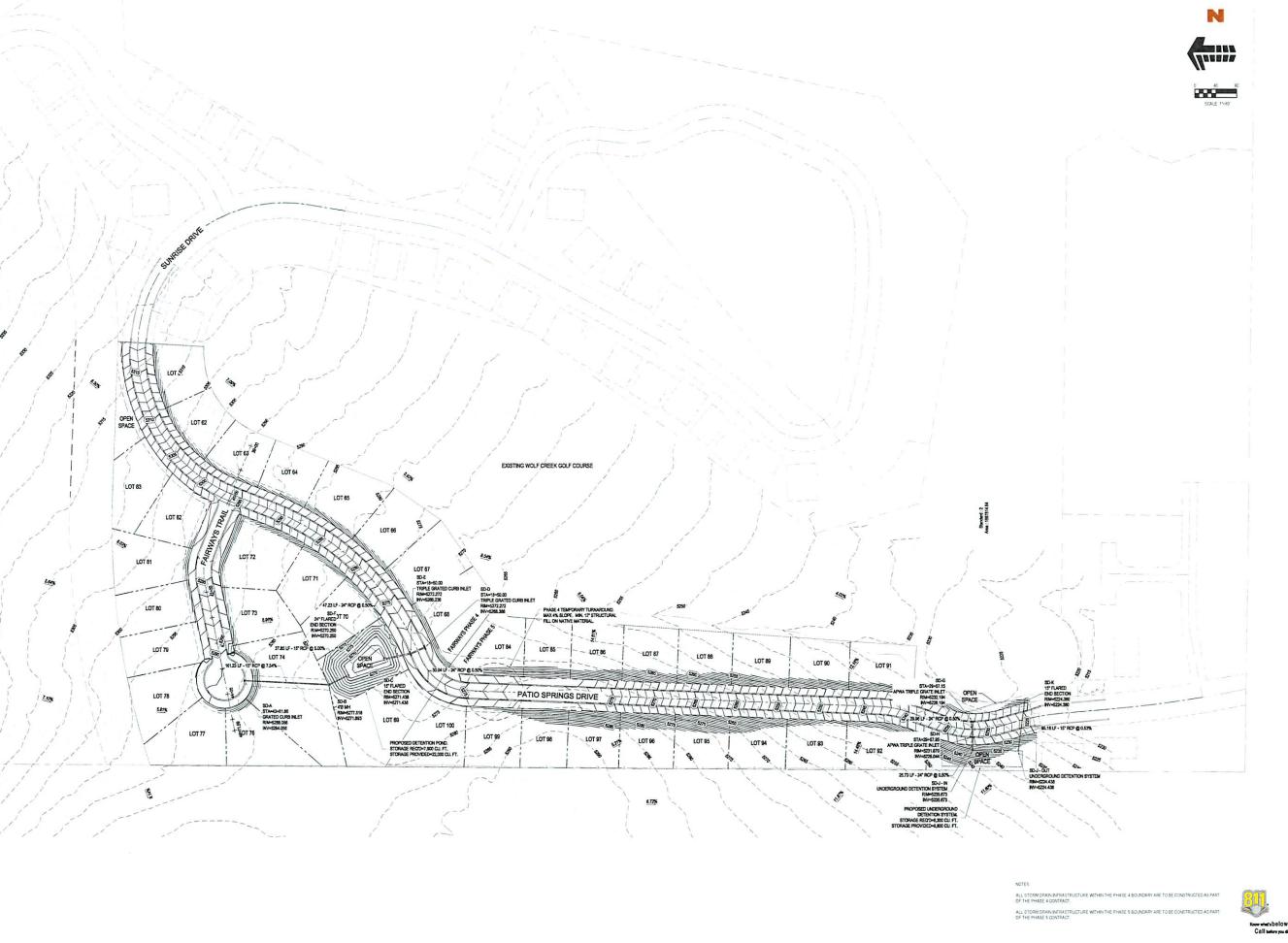
# WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5

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SHEET TITLE: UTILITY PLAN







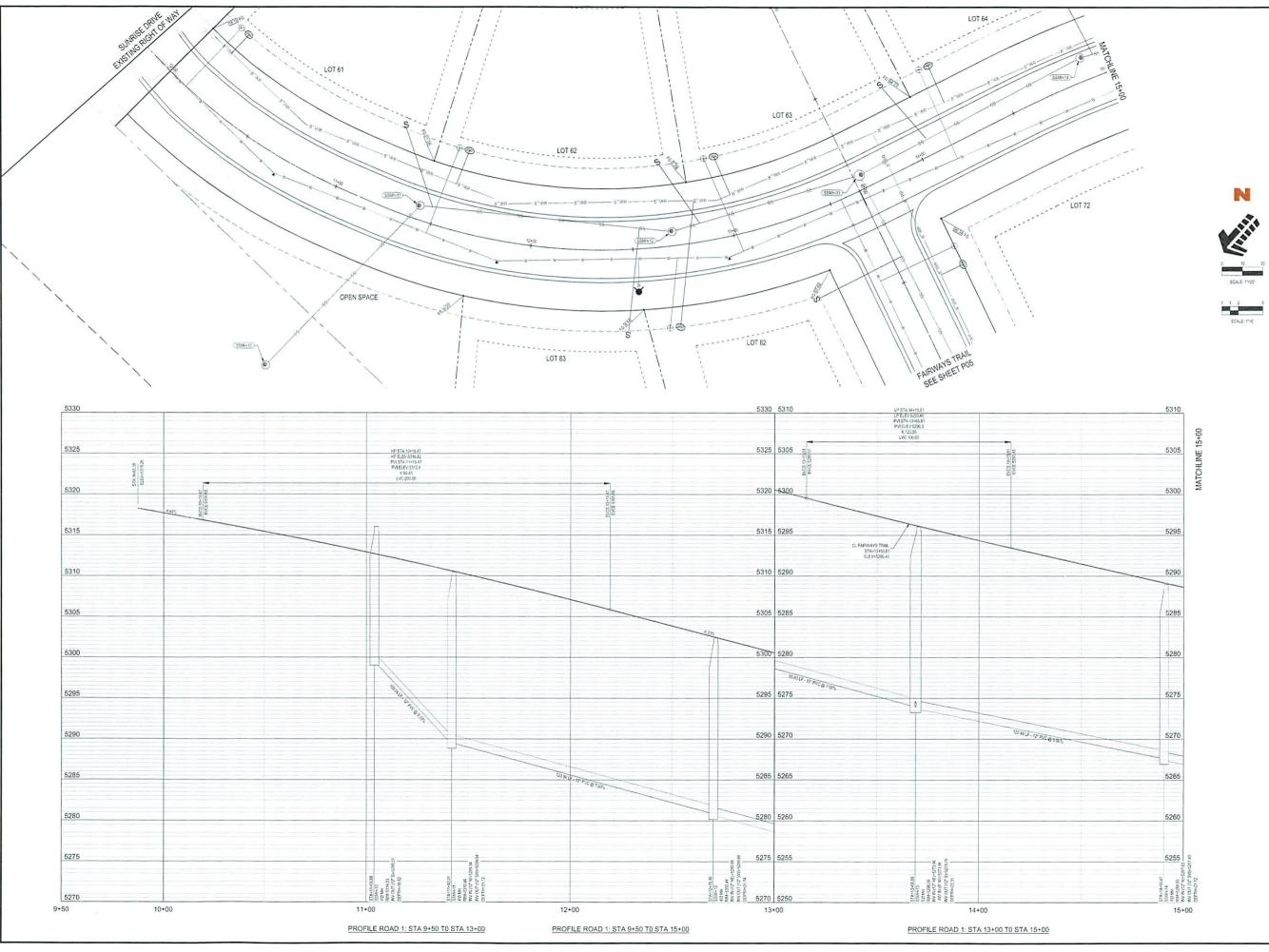


WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5

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Project No:	WAT01.01
Drawn By:	JST
Checked By:	RMF
Date:	03/09/2016
SHEET TITLE:	
GRADING PLAN	







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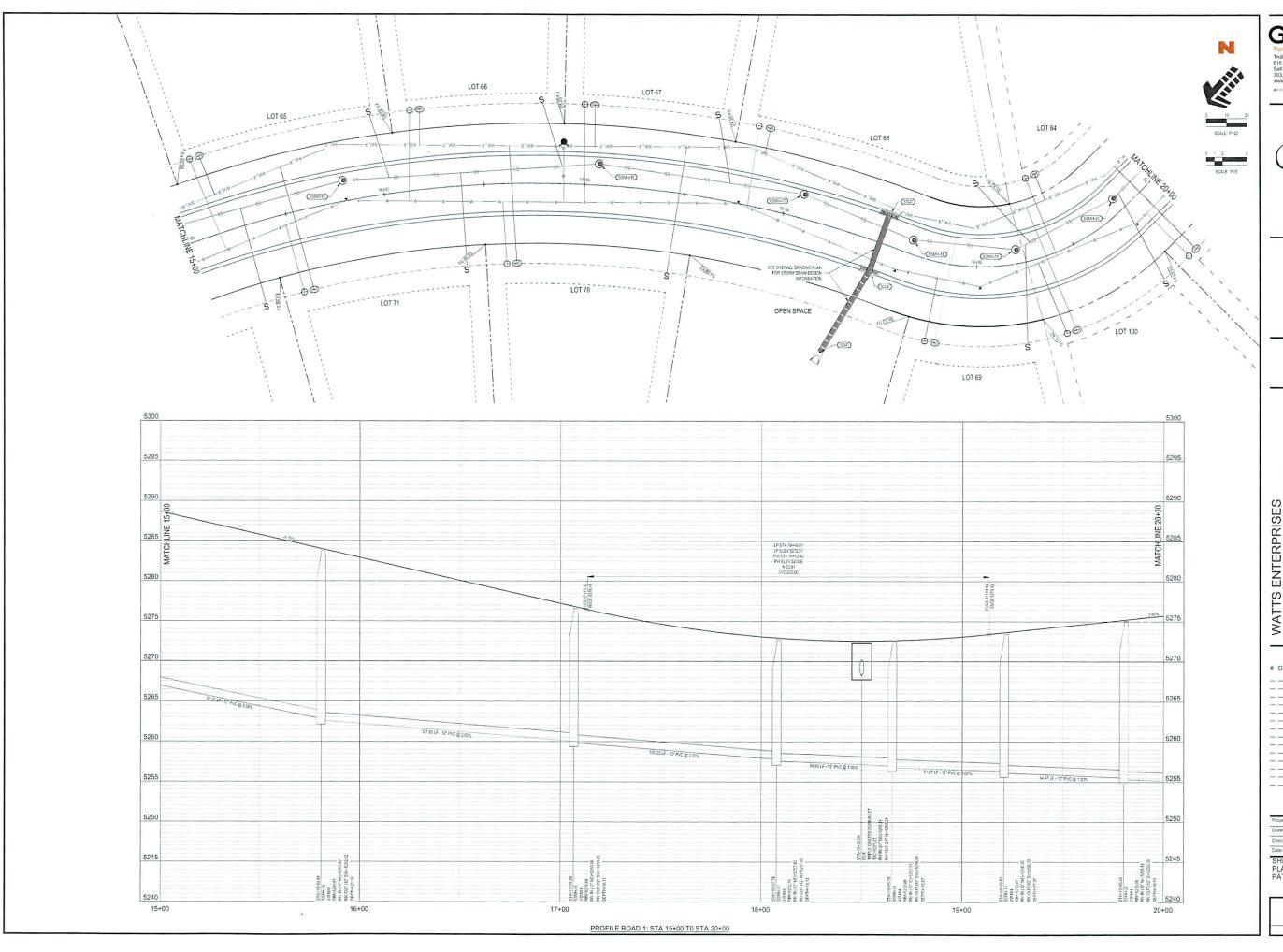
WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5

# Date Issue / Description

EDEN, UTAH 84310

SHEET TITLE: PLAN & PROFILE PATIO SPRINGS DRIVE





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# Date Issue / Description Init.

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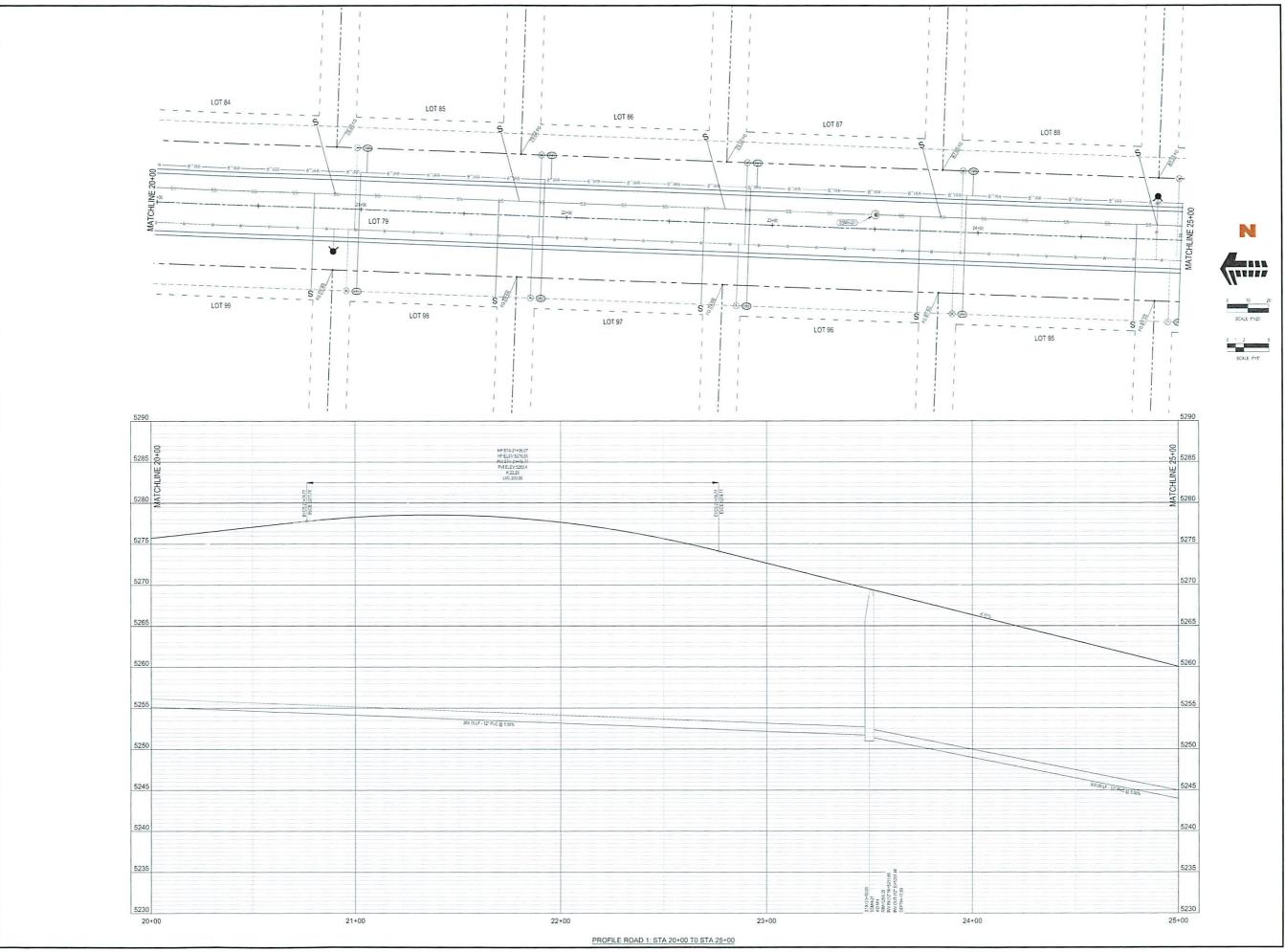
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SHEET TITLE: PLAN & PROFILE PATIO SPRINGS DRIVE









WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5

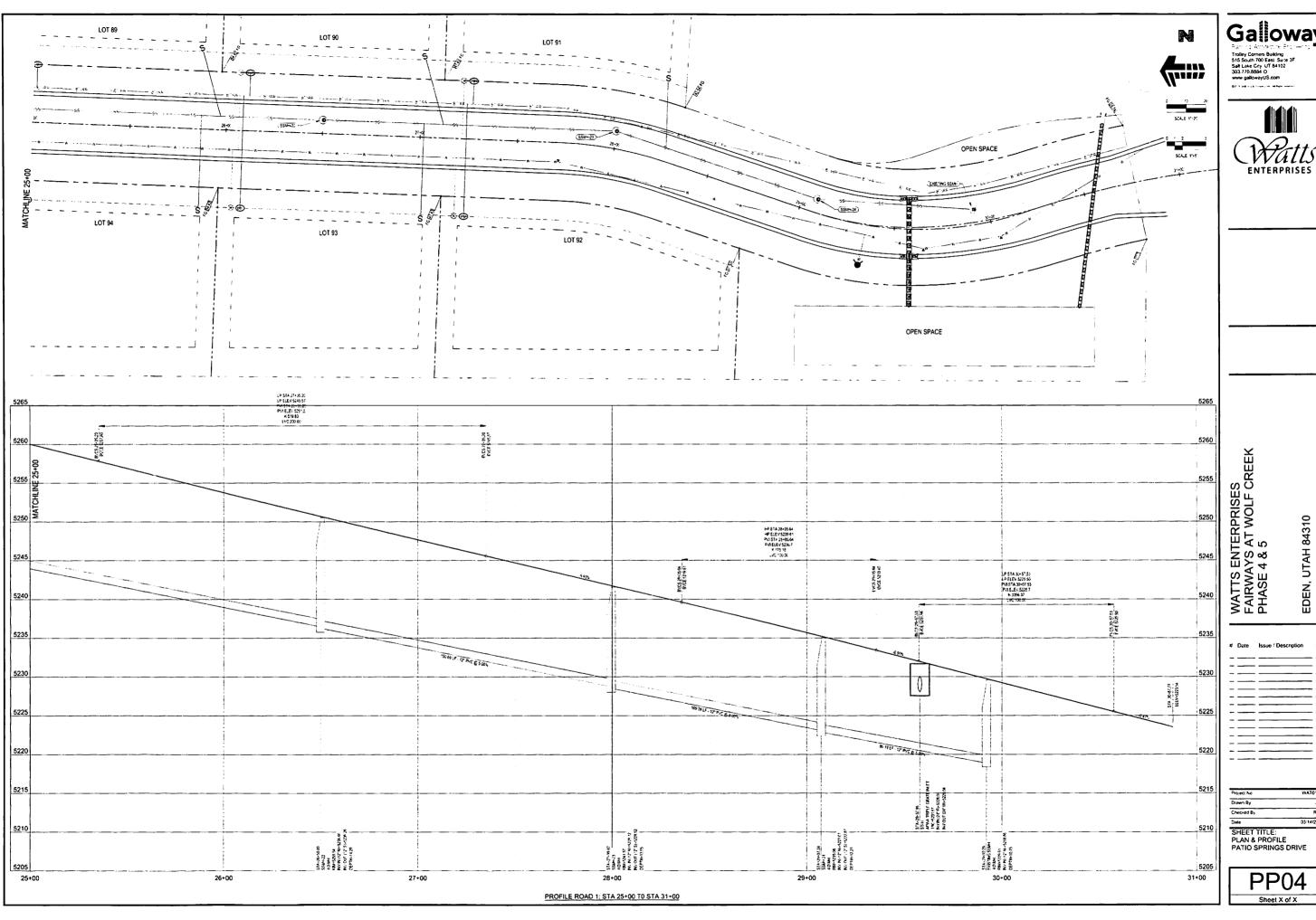
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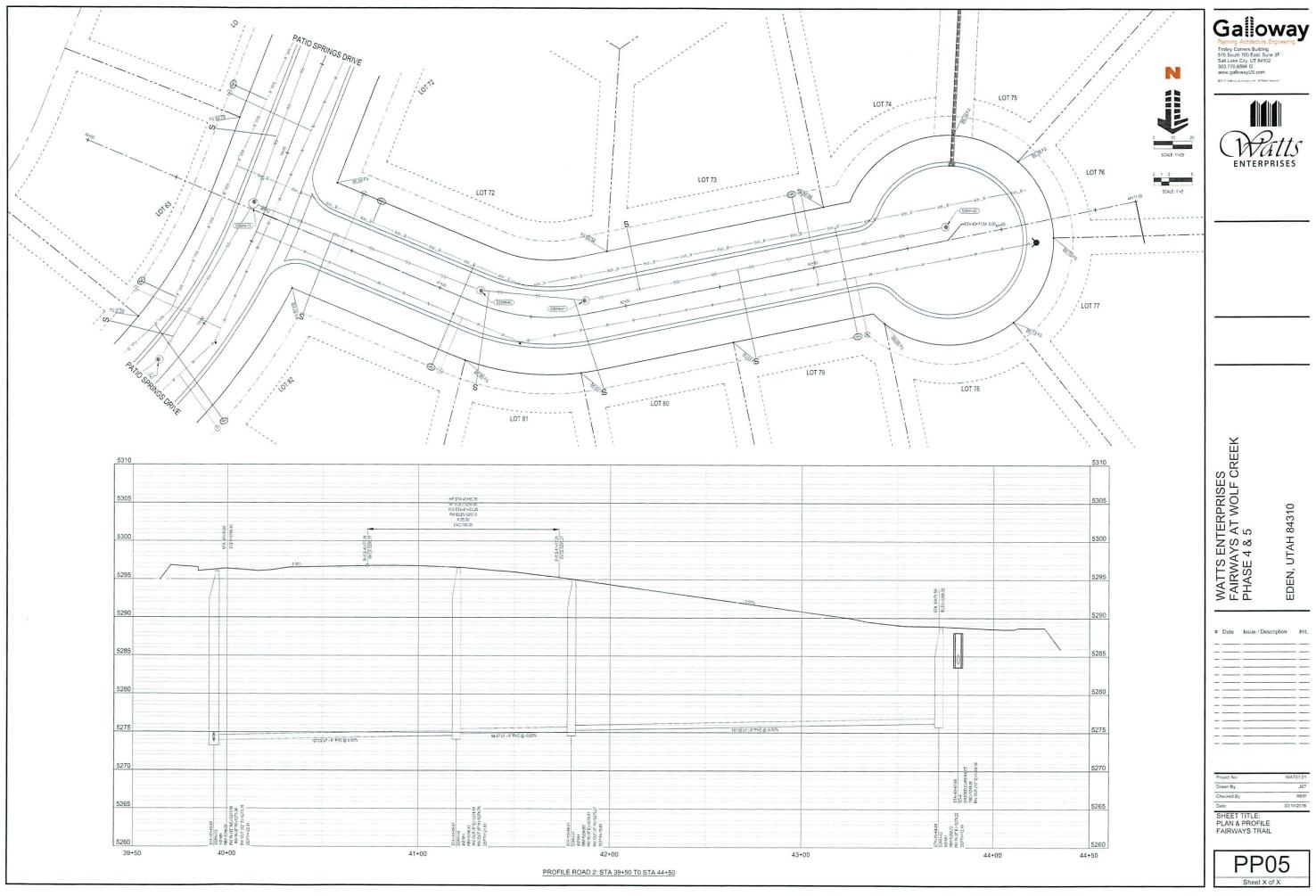
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PP03 Sheet X of X

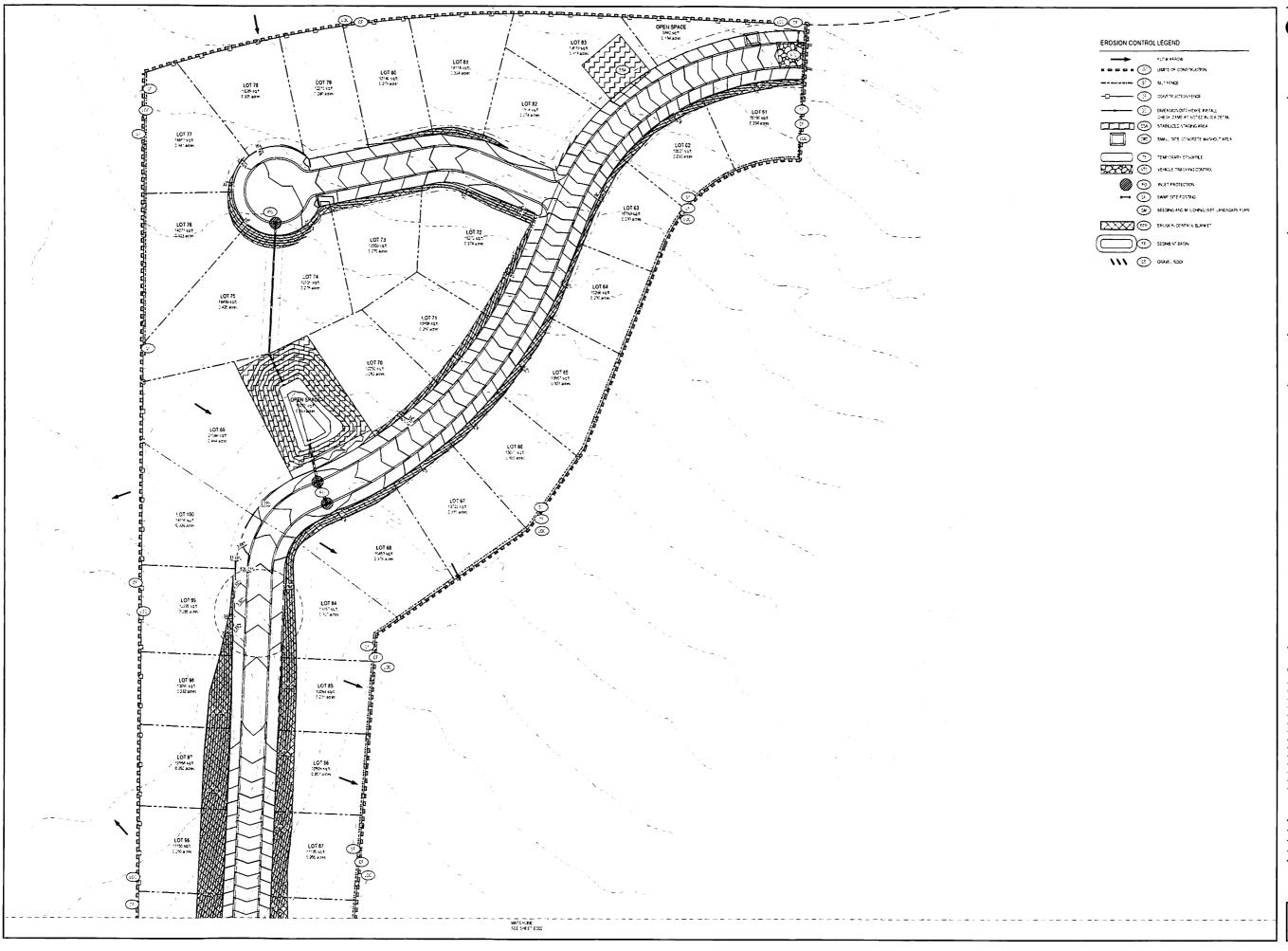


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PP05

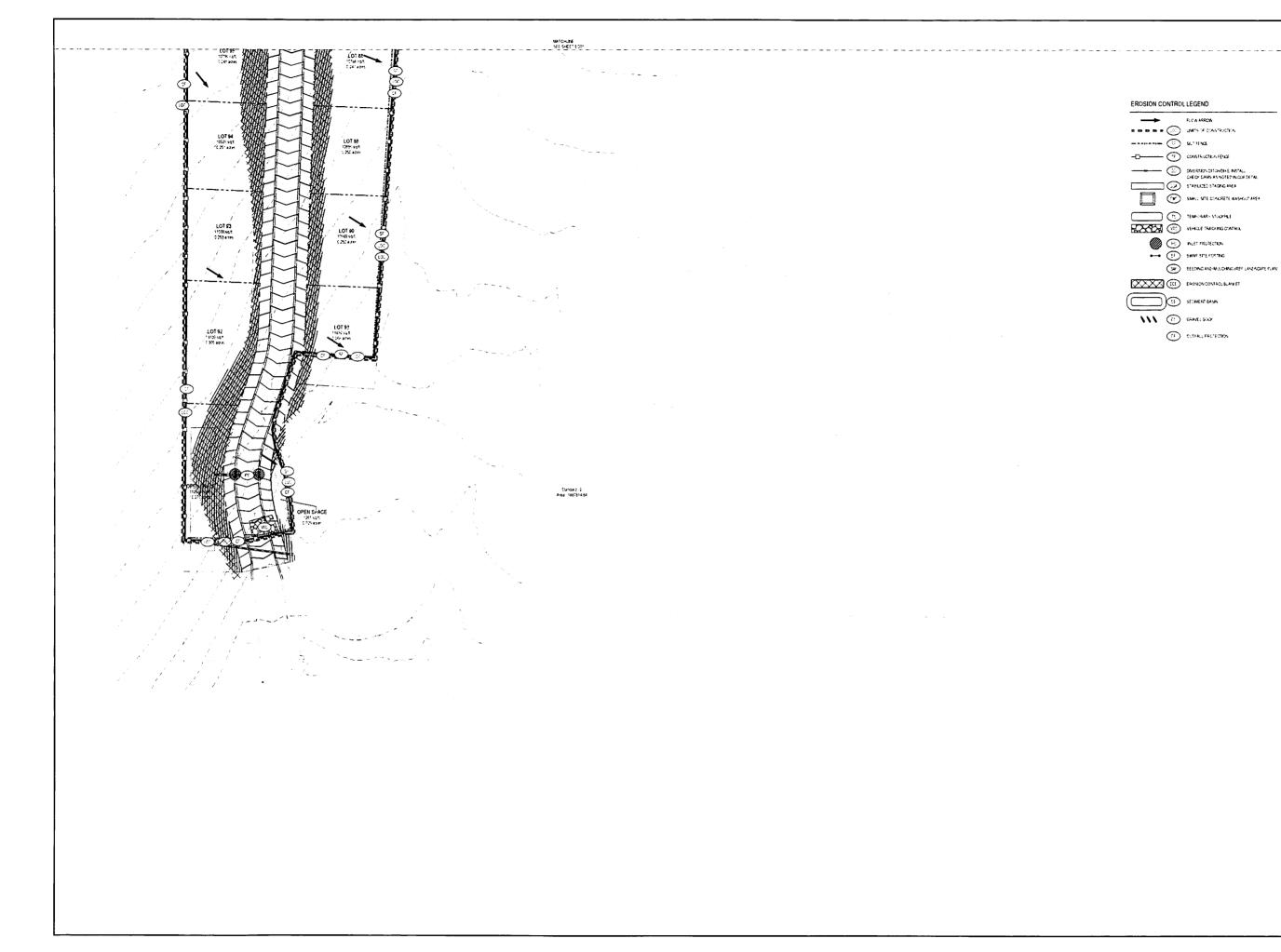




WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5

Checked By Date AA/XA/XI
SHEET TITLE:
EROSION CONTROL PLAN

EC01 Sheet X of X



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WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5

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Checked By JJJ

Date XXIXCA

SHEET TITLE:
EROSION CONTROL PLAN

EC02

# Straw hale harrier 1. GENERAL A Description A temporary sediment barner consisting of a row of entrenched and anchored straw bales. B. Purpose. To intercept and detain small amounts of sediment from disturbed areas of limited extent. To decrease the velocity of sheet flows and low-to-moderate level 2. PRODUCTS (Not used) 3. EXECUTION Place bales in a single row, lengthwise with ends of adjacent bales tightly abutting each other for the following conditions. Perimeter Control. Place barrier at down gradient limits of disturbance 2) Sediment Barrier. Place barrier at toe of slope or soil stockpile. 3) Protection of Existing Waterways. Place barrier at top of stream bank 4) Inlet Protection. Wire-bound or string-tie all bales. Install so straw bale bindings are onented around the sides rather than along the tops and bottoms of the bales (in order to prevent) deterioration of the bindings). C. Chink the gaps between bales (filled by wedging) with straw to prevent water from escaping between the bales. Loose straw scattered over the area immediately uphill from a straw bale barrier tends to increase barrier efficiency. D. When bales are installed at the toe of a slope, place the bales away from the slope for increased storage capacity. E. Remove straw bale barriers when they have served their usefulness, but not before Inspect immediately after any rainfall and at least daily during prolonged rainfall. Pay close attention to the repair of damaged bales, end runs and undercutting. beneath bales. 3) Necessary repairs or replacement of bales must be accomplished promptly. Remove sediment deposits after each rainfall. It must be removed when the level of deposition reaches approximately one-half the height of the bale(s). 5) Realign bales to provide a continuous barrier and to fill gaps. 6) Recompact soil around bales as necessary to prevent piping. THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE (BMP). IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE MAINTENANCE OF THIS TYPE OF INSTALLATION IS ADPORTMANT AND SHOULD BE CONTINUOUSLY MONTOKED BY THE CONTINUOUSLY MONTOKED BY MONTOKED SA NEEDED. === TWO - 2"x2"X3" STAKES EACH BALE \_ • PLAN EXPANSION JOINT WOOD OR STEEL FENCE POST STAKE AND ENTRENCHED FILTER RUNOFF 18 1 VE EMBED BALE WINDHUM SECTION

Straw bale barrier

5

Frbruery 2006

121

February 2006

# Silt fence

### 1. GENERAL

- Description. A temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts and entrenched.
- Application. To intercept sediment from disturbed areas of limited extent.
- Perimeter Control: Place barrier at down gradient limits of disturbance. Sediment Barrier: Place barrier at toe of slope or soil stockpile.
- E. Protection of Existing Waterways: Place barrier at top of stream bank.

- 2. PRODUCTS PRODUCTS
   A. Fabric. Synthetic filter fabric shall be a pervious sheet of propylene, nylon. polyester, or polyethylene yarn. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of 6 months of expected usable construction life at a temperature range of 0 deg F to 120 deg F.
   Burlap. 10 ounces per square yard of fabric.
   C. Posts. Either 2" x 4" diameter wood, or 1.33 pounds per linear foot steel with a minimum length of 5 feet, or steel posts with projections for fastening wire to them.

- A. Cut the fabric on site to desired width, unroll, and drape over the barrier. Secure the fabric toe with rocks or dirt and secure the fabric to the mesh with twin, staples or
- similar devices.

  B. When attaching two silt fences together, place the end post of the second fence inside the end post of the first fence. Rotate both posts at least 180 degrees on a clockwise direction to create a tight seal with the filter fabric. Drive both posts into
- the ground and bury the flap.

  C. When used to control sediments from a steep slope, place silt fences away from the toe of the slope for increased holding capacity.
- Maintenance.
   Inspect immediately after each rainfall and at least daily during prolonged rainfall.
   Should the fabric on a silt fence or filter barrier decompose or become ineffective.
- Should the fabric on a silt fence or filter barrier decompose or become ineffective before the end of the expected usable life and the barrier still be necessary, replace the fabric promptly.
   Remove sediment deposits after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier.
   Re-anchor fence as necessary to prevent shortcutting.
   Inspect for runoff bypassing ends of barriers or undercutting barriers.

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INSTALLATION SEQUENCE

TOE DETAIL

Silt fence

2 FEET

122

### 1. GENERAL

- A. Description: A temporary ridge of compacted soil located at the top or base of a
- sloping disturbed area.

  B. Purpose. To intercept up gradient runoff and convey around construction site and to

### 2 PRODUCT (Not used)

### 3. EXECUTION

- Construct.
   Along midpoint of construction slope to intercept runoff and channel to controlled discharge point.

- discharge point.
  2) Around base of soil stockpiles to capture sediment.
  3) Around perimeter of disturbed areas to capture sediment.
  5. Locate the dike to minimize damages by construction operations and traffic C. Clear and grub area for dike construction. Build the dike before construction begins.

  D. Excavate channel and place soil on down gradient side.
- Shape and machine compact excavated soil to form ridge.
   Shape and machine compact excavated soil to form ridge.
   Place erosion protection (rip rap, mulch) at outlet. Stabilize channel and ridge as required with mulch gravel or vegetative cover. Temporary or permanent seeding and mulch shall be applied to the dike within 15 days of construction.
- Maintenance.
   I) Inspect immediately after each rainfall and at least daily during prolonged
- rainfall.

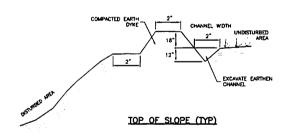
  2) Look for runoff breaching dike or eroding channel or side slopes.

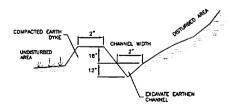
  3) Check discharge point for erosion or bypassing of flows.

  4) Repair and stabilize as necessary.

  5) Inspect daily during vehicular activity on slope, check for and repair any traffic

THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE (BMP). IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE MAINTENANCE OF THIS TYPE OF INSTITULATION IS IMPORTANT AND SHOULD BE CONTINUOUSLY MONITORID BY THE CONTINUOUS AND ENGINEER. DETAILS SHOWN HERE HOPCHAIN THEY FOR CONSTRUCTION, AND SHOULD BE MODERED AS INEEDED.





BASE OF SLOPE (TYP)

Diversion dike 123 February 2006 9

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WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5

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Drawn By Checked By SHEET TITLE EROSION CONTROL DETAILS (APWA)

**EC03** 

# Inlet protection - gravel sock Inlet protection - fence or straw bale Equipment and vehicle wash down area 1. GENERAL 1. GENERAL 1. GENERAL Description. Placement of gravel sock on grade. Upstream of, or in front of storm drain inlets to filter or pond water runoff. A. Description. A temporary sediment barrier around storm drain inlet. B. Application. At inlets in paved or unpaved areas where up gradient area is to be A. Description. A temporary stabilized pad of gravel for general washing of equipment and construction vehicles. At inlets in paved or unpaved areas where up gradient area is to be disturbed by construction activities. disturbed by construction activities B Application 1) At any site where regular washing of vehicles and equipment will occur. 2) May also be used as a filling point for water trucks limiting erosion caused by 2. PRODUCT (Not used) 2. PRODUCTS (Not used) overflow or spillage of water 3. EXECUTION 3. EXECUTION Installation and application criteria. 2. PRODUCT (Not used) On-grade inlet protection: Provide on-grade inlet protection when completely blocking a storm drain inlet 1) Provide up gradient sediment controls, such as silt fence during construction of EXECUTION When construction of inlet is complete erect straw bale barrier, silt fence or other box would result in forcing water further downstream would cause flooding or Clear and grub area and grade to provide maximum slope of 1 percent away from other undesirable results. 2) Prepare filter media (gravel sock, straw waddle, or other approved media) in approved sediment barrier surrounding perimeter of inlet. Install filter fabric completely around grate. accordance with manufacturer's recommendations. 3) Install filter media just upstream of the inlet box. 4) Filter media shall butt tightly against the face of the curb and angle at B. Maintenance. C. Place filter fabric under wash down area if desired (recommended for wash area that remains more than 3 months). Install silt fence down gradient (see Plan 122) 1) Inspect inlet protection after every large storm event and at a minimum of once Remove sediment accumulated when it reaches 4-inches in depth. approximately a 45-degree angle away from the curb to trap runoff between the E. Maintenance. media and the curb. 5) Excessive flows will flow either over or around the filter media and into the inlet Repair or re-align barrier or fence as needed. Look for bypassing or undercutting and re-compact soil around barrier or fence Requires periodic top dressing with additional stones. Solely used to control sediment in wash water. Cannot be utilized for washing. 2) Sully used to control seamed in wash water. Cannot be unized to washing equipment or vehicles that may cause contamination of runoff (such as fertilizer equipment or concrete equipment). 3) Keep the wash area in a condition which will prevent tracking or flow of mud onto as required Expect ponding behind the filter media. Drop inlet protection: Use drop inlet protection at low points in the curb and when diverting flows further downstream will not cause undesirable results. Prepare filter media (gravel sock, straw waddle, or other approved media) in public rights-of-way. 4) Periodically dress the top with 2-inch stone may be required, as conditions demand, and repair any structures used to trap sediments accordance with manufacturer's recommendations. 3) Install filter media around the entire perimeter of the inlet grate. Inspect daily for loss of gravel or sediment buildup. Inspect adjacent area for sediment deposit and install additional controls as 4) Filter media shall butt tightly against the face of the curb on both sides of the necessary. 7) Expand stabilized area as required to accommodate activities. 8) Maintain silt fence as outlined in Plan 122. inlet grate. 5) Excessive flows will either flow around the media or over the top and into the inlet box Expect ponding around the inlet box. C. Maintenance 1) Inspect inlet protection after every large storm event and at a minimum of once Remove sediment accumulated when it reaches 2-inches in depth. Replace filter medium when damage has occurred or when medium is no longer functioning as intended. 16 10 THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE (BMP). IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE MANTENANCE OF THIS TYPE OF INSTALLATION IS IMPORTANT AND SHOULD BE CONTINUOUSLY MONITORED BY THE CONTRACTOR AND ENGINEER. DETAILS SHOWN HERE HIGHLIGHT IMPORTANT PARTS OF CONSTRUCTION, AND SHOULD BE MODIFIED AS NEEDED. SECURE MESH TO POSTS WITH WIRE STAPLES 1" LONG OR TIE WIRES OR HOG RINGS SILT FENCE FLOW FLOW ON-GRADE INLET PROTECTION DETAIL FILTER MEDIA (HEIGHT 3" MIN. 4" MAX.) STRAW BALE BARRIER SILT FENCE FLOW FLOW WASH DOWN AREA SUMP INLET PROTECTION DETAIL Inlet protection - gravel sock Equipment and vehicle wash down area Inlet protection - fence or straw bale 124 124 125 February 2006 15 17 September 2006

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> Watts ENTERPRISES

WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5

# Date Issue / Description Init.

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 Project No.
 WAT01.01

 Drawn By:
 JST

 Checked By:
 RMP

 Date:
 03/14/2016

SHEET TITLE: EROSION CONTROL DETAILS (APWA)

EC04

# February 2006

### Stabilized roadway entrance

- GENERAL
   A. Description. A temporary stabilized pad of gravel for controlling equipment and
- construction vehicle access to the site.

  B. Application. At any site where vehicles and equipment enter the public right of way.

# 2. PRODUCT (Not used)

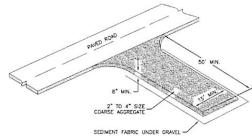
### 3 EXECUTION

- EXECUTION
  A. Clear and grub area and grade to provide maximum slope of 1 percent away from paved roadway.
  B. Compact subgrade.
  C. Place filter fabric under stone if desired (recommended for entrance area that remains more than 3 months).
  D. Maintenance.
  1) Prevent tracking or flow of mud into the public right-of-way.
  2) Periodic top dressing with 2-inch stone may be required, as conditions demand, and repair any structures used to trap sediments.
  3) Inspect daily for loss of gravel or sediment buildup.
  4) Inspect adjacent area for sediment deposit and install additional controls as necessary.

- necessary.
  5) Expand stabilized area as required to accommodate activities.

18

NARRATIVE: THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE (BMP). IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE. MANIFESHANCE OF THIS TYPE OF INSTALLATION IS IMPORTANT AND SHOULD BE CONTINUOUSLY MONTORED BY THE CONTRACTOR AND ENGINEER. DETAILS SHOWN HERE HIGHLIGHT IMPORTANT PARTS OF CONSTRUCTION, AND SHOULD BE MODIFIED AS NEEDED.



Stabilized roadway entrance

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WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5

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EDEN, UTAH 84310

Drawn By: Checked By: 03/14/2016

SHEET TITLE: EROSION CONTROL DETAILS (APWA)

EC05 Sheet X of X

### 30" Frame and cover

A. The frame and cover fits the manhole in Plan 411.

# 2. PRODUCTS

- PRODUCTS

  A. Castings: Grey iron class 35 minimum, ASTM A 48, coated with asphalt based paint or better (except on machined surfaces).

  1) Cast the heat number on the frame and cover.

  2) Give the frame and cover a machine finish so the cover will not rock.

  3) \( \text{designates machined surface.} \)

  4) Cast the words "SEWER" on the cover in upper case flush with the surface.

### 3. EXECUTION

A. Except in paved streets, provide locking manhole covers in easements, alleys, parking lots, and all other places. Drill and tap two holes to a depth of 1-inch at 90 degrees to pry hole and install 3/4 x 3/4-inch allen socket set screws.

### 1. GENERAL

- A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the manhole.

- Manhole size.
   Diameter is 4 feet: For sewers under 12" diameter.
   Diameter is 5 feet: For sewers 12" and larger, or when 3 or more pipes intersect.

# 2. PRODUCTS

- PRODUCTS
  A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
  B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
  C. Concrete: Class 4000, APWA Section 03 30 04.
  D. Riser and Reducing Riser: ASTM C 478.
  E. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A 615.
  F. Grout: 2 parts sand to 1 part cernent mortar. ASTM C 1329.
  G. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.

### 3. EXECUTION

- EXECUTION

  A. Foundation Stabilization: Get ENGINEER's permission to use a sewer rock or a granular backfill borrow in a geotextile wrap to stabilize an unstable foundation.

  B. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.

- modified proctor density, APWA Section 31 23 26.

  C. Invert Cover. During construction, place invert covers over the top of pipe in manholes that currently convey sewerage. See Plan 412.

  D. Pipe Connections: Grout around all pipe openings.

  E. Pipe Seal: Install rubber-based pipe seals on all plastic pipes when connecting plastic pipes to manholes. Hold water-stop in place with stainless steel bands.

  F. Joints: Place flexible gasket-type sealant in all riser joints. Finish with grout.

  G. Adjustment: If the required manhole adjustment is more than 1'-0', remove the cone and grade rings and adjust the manhole elevation with the appropriate manhole section, the cone section, and the grade rings or plastic form to make frame and lid march finish rarde.
- section, the cone section, and the grade rings or plastic form to make frame and lid match finish grade.

  H. Finish: Provide smooth and neat finishes on interior of cones, shafts, and rings. Imperfect moldings or honeycombs will not be accepted.

  Backfill: Provide backfill against the manhole shaft. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.

212

### Cover collar for sanitary sewer manhole

### 1. GENERAL

A. In a pavement surface, the concrete will support the frame under traffic loadings.

### 2. PRODUCTS

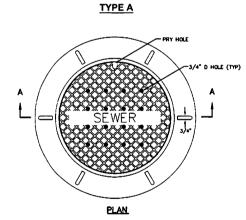
- Concrete: Class 4000, APWA Section 03 30 04.
   Concrete Curing Agent: Type ID Class A (clear with fugitive dye), membrane forming compound, APWA Section 03 39 00.

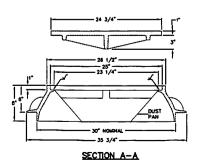
### 3. EXECUTION

- Pavement Preparation: Provide a neat vertical and concentric joint between concrete and existing asphalt concrete surfaces. Clean edges of all dirt, oil, and
- Concrete Placement: Fill the annular space around the frame and cover casting with concrete. Apply a broom finish. Apply a curing agent.

216

# 210



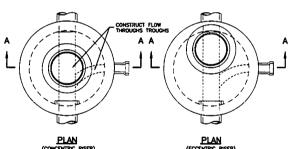


30" Frame and cover 211

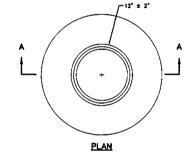
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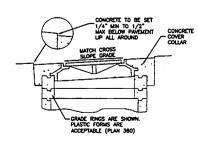
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April 2011



411





SECTION A-A

Cover collar for sanitary sewer manhole 217

413

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WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5

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SHEET TITLE: SANITARY SEWER DETAILS (APWA)

**DT01** Sheet X of X

PLAN (CONCENTRIC RISER) PLAN (ECCENTRIC RISER) ALL AROUND DETAIL UNIMPROVED AREAS REMOVE UPPER 1/3 OF PIPE AFTER MANHOLE IS COMPLETED. OR 5 FEET DAMETER PROVIDE MORTAR SHELF WITH SLOPE OF 1.5" IN 12" SECTION A-A

Sanitary sewer manhole

213

### Trench backfill

A. The drawing applies to backfilling the trench above the pipe zone.

Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 3-inches.
 Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.

# 3. EXECUTION

- Trench Backfill:
   DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate as trench
- 2) Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density. APWA Section 31 23 26.
- 26.
  3) Water jetting is NOT allowed.
  4) Submission of quality control compaction test result data developed for haunching areas may be requested by ENGINEER at any time. Provide results of tests immediately upon request.

  3. Flowable Fill: When required, place controlled low strength material in the trench, APWA Section 31 05 15. Cure the fill before placing surface restorations.

- APWA Section 31 05 15. Cure the fill before placing surface restorations.
  C. Surface Restoration:
  1) Landscaped Surface: Rake to match existing grade. Replace vegetation to match pre-construction conditions. Follow APWA Section 32 92 00 (turf or grass) or APWA Section 32 93 13 (ground cover) requirements.
  2) Paved Surface: Do not install asphall or concrete surfacing until trench compaction is acceptable to ENGINEER. Follow APWA Section 33 05 25 (asphalt surfacing), or APWA Section 33 05 25 (concrete surfacing).

202

### Pipe zone backfill

### 1. GENERAL

. Install the pipe in the center of the trench or no closer than 6-inches from the wall of

- PRODUCTS

  A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.

  B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.

  C. Concrete: APWA Section 03 30 04.

- Convete: APYNA Section US 30 04.
   Flowable Fill: Target is 60 ps in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.
   Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice. APWA Section 31 05 19.

# 3. EXECUTION

- EXECUTION
   Excavate the Pipe Zone: Width is measured at the pipe spring line and includes any necessary sheathing. Provide width recommended by pipe manufacturer. Follow manufacturers recommendations when using trench boxes.
   Foundation Stabilization: Get ENGINEER's permission before installing common fill. Vibrate to stabilize. Installation of stabilization-separation geotaxtile will be required to separate backfill material and native subgrade materials if common fill cannot provide a working surface or prevent soils migration.
   Base Course:

- Furnish untreated base course material unless specified otherwise by pipe manufacturer.
   Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
- When using concrete, provide at least Class 2,000 per APWA Section 03 30 04.
   Pipe Zone: DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate in the pipe zone. Water jetting is NOT allowed.
   Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26 unless pipe manufacturer requires more stringent installation.
   Submission of quality control compaction test result data developed for the haunch zone may be requested by ENGINEER at any time. CONTRACTOR is to provide nextly set facts immediately uson required.

- naunch zone may be requested by ENGINEER at any time. CONTRACT to provide results of tests immediately upon request.

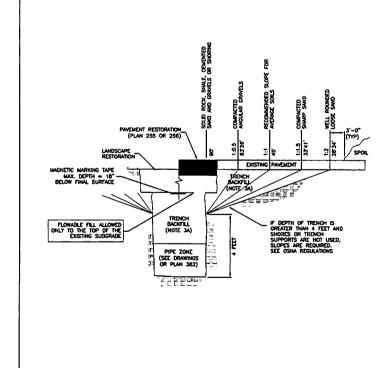
  Flowable Fill (when required and if allowed by pipe manufacturer):

  Place the controlled low strength material, APWA Section 31 05 15.

  Prevent pipe flotation by installing in lifts and providing pipe restraints as required by pipe manufacturer.

  Reset pipe to line and grade if pipe "floats" out of position.

204



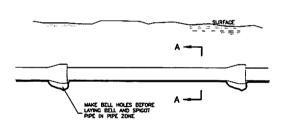
Trench backfill

203

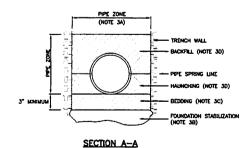
January 2011

381

January 2011



# ELEVATION VIEW



INSTALLATION CONCRETE PIPE: FOLLOW ASTM C 1479
"EXHAUST PARTICLE FOR MEDILUTION OF PRECISE CENTRET SCHIOL, ETONIA DIVINE, MIC COLNERT PIPE USING STUDIORS PVC AND HDPE PIPE: FOLLOW ASTM D 2321
"SMOOND PINCTOC FOR UNCERTAIND WITHLIBER OF THEMORAPIC PPE FOR SCHOOL MO. CORRUGATED METAL PIPE: FOLLOW ASTM A 798

382

**Galloway** 

Trolley Corners Building 515 South 700 East. Suite 3F Salt Lake City, UT 84102 303,770,8884 O

www.gallowayUS.com

WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5 UTAH 84310

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# Date

Project No	WAT01.0
Orawn By	JS,
Checked By	RNF
Date	03/14/2016

SHEET TITLE: SANITARY SEWER DETAILS (APWA)



VITRIFIED CLAY PIPE: FOLLOW ASTM C 12. Pipe zone backfill 205

### WOLF CREEK WATER AND SEWER IMPROVEMENT DISTRICT SPECIFICATIONS

- ALL WETTED MATERIALS SHALL BE CERTIFIED TO MEET NSF-61 AND NSF-372.
- . MATERIAL OF PIPE (DUCTLE IRON CLASS 51)
- . DEPTH OF COVER (5 FEET)
- . TYPE OF SERVICE SADDLE ( 1" DIRECT TAP)
- . SIZE AND TYPE OF SERVICE LATERAL (1" COPPER, 200 PSI OR CTS HDPE)
- . SERVICE FITTINGS (1" MUELLER COMPRESSION FITTINGS )
- CORP. STOPS (1"MUELLER)
- SETTERS (1" MUELLER WITH DOUBLE CHECK AND LOCKING DEVICE)
- METER BOX (24"DIA X 36" PLASTIC OR CONCRETE)
- METER BOX LID (24" WITH 2" HOLE IN THE MIDDLE)
- . DEPTH OF SERVICE LINE AND METER ( 5, METER 14"-24" BELOW LID OF
- TYPE OF METER (NEPTUNE RADIO READ.)
- THRUST RESTRAINT (BOTH MEGA-LUG AND CONCRETE)
- . FIRE HYDRANTS (MUELLER 5' BURY )
- . MAIN LINE LOCATION IN NEW SUBDIVISIONS (IN ROADS SHOULDERS OK IF EXISTING ROAD WITHOUT C+G )
- UNDER NO CIRCUMSTANCE SHALL THE PIPE OR ACCESSORIES BE DROPPED INTO THE TRENCH
- OPEN ENDS OF ALL PIPELINES UNDER CONSTRUCTION SHALL BE COVERED AND EFFECTIVELY SEALED AT THE END OF THE DAY'S WORK



WOLF CREEK WATER AND SEWER IMPROVEMENT DISTRICT STANDARD WATER DETAILS

- . METERS LOCATED IN R.O.W. ALONG FRONTAGE
- TRACER WIRE REQUIRED (MIN 14 GA, BRING UP FH. BARREL AND WRAP AT LEAST TWICE ABOVE GROUND)
- WARNING TAPE (2" WIDE METALLIC, "BURIED WATER LINE BELOW", LOCATE 18"-24" BELOW FINISHED GRADE)
- BLOW OFFS ( 2" FLUSH VALVE -TYPE WITH DRAIN, MAINGUARD MODEL \$78 OR
- . PRV STATIONS (USE CLA-VAL VALVES WITH BYPASS AND PRESSURE RELIEF)
- . AIR/VAC VALVES (LOCATED AT PEAKS, VENT OUTSIDE TRAVELED WAY, SEE
- MAIN LINE VALVES (MUELLER VALVES WITH MEGA LUG ON ALL BRANCHES AND RINS OF TEES AND CROSSES )
  PRESSURE TEST THE LINE TO 200 LBS FOR TWO HRS.
  - ADD CHLORINE GRANULES IN LINE AS IT IS LAID.
  - TAKE A CHLORINE TEST AT 50 PPM AND THEN 24 HRS LATER TAKE ANOTHER TEST TO ENSURE THAT A RESIDUAL OF 25 PPM REMAINS.
  - FLUSH AND TAKE A SAMPLE TO THE LAB TO VERIFY THAT IT PASSES.
  - ALL PIPE AND SERVICE CONNECTIONS WILL BE BEDDED WITH IMPORTED MATERIAL, SAND OR LIKE MATERIAL.
  - CONTRACTOR'S LICENCE AND PROOF OF INSURANCE REQUIRED NO THIRD PARTY PERSON.



WOLF CREEK WATER AND SEWER IMPROVEMENT DISTRICT STANDARD WATER DETAILS



WOLF CREEK WATER AND SEWER IMPROVEMENT DISTRICT STANDARD WATER DETAILS

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DE EXTENSION OF PROPERTY LINE

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TYPICAL WATER CONNECTION/RE-CONNECTION

COMPONATION STORY

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GENERAL NOTES:

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2. ALL HIMS SHALL BE ROTALIZE NEW.

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4. THE WOLF CREEK WATER COMPANY SHALL BE CONTACTED AT

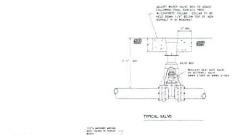
1. EAST 48 HOURS PROBE TO AND CONSTRUCTION COURSET. SYSTEM

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OFFICENCY, B





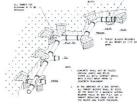


TABLE OF BLAFFIC AREAS IN SQ. FT FOR CONCRETE THRUST BLOCKING

REST OF STATE OF SECURITIONS SHOWN SHOWN

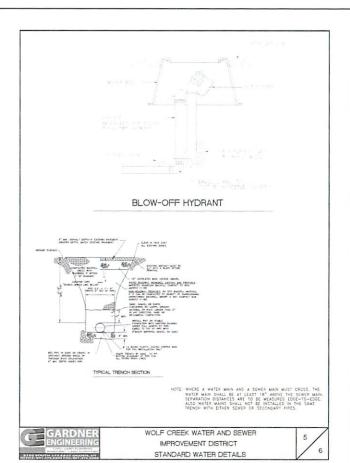
ALL VALVES, TIES, CROSSES AND BENDS SHALL ALSO BE FITTED WITH MECHANICAL RESTRAINTS, SUCH AS MEGA LINES OR APPROVED EQUAL.

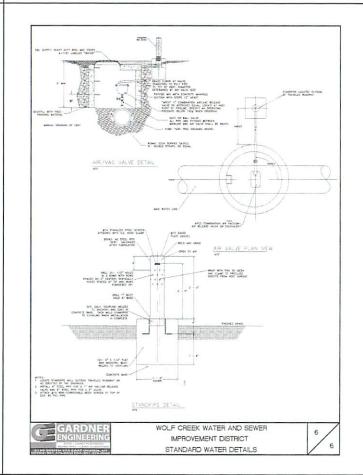
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THRUST BLOCKING DETAIL

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WOLF CREEK WATER AND SEWER IMPROVEMENT DISTRICT STANDARD WATER DETAILS







ENTERPRISES

S CREEK WATTS ENTERPRISES FAIRWAYS AT WOLF C PHASE 4 & 5

#	Date	Issue / Description
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Drawn By: SHEET TITL

WATER DETAILS (WCWSID)

**DT03** Sheet X of X

### 30" Frame and cover

### 1. GENERAL

- The frame and cover fits.

  1) Cleanout box type B in Plan 331, and

# 2. PRODUCTS

- Castings: Grey iron class 35 minimum, ASTM A 48.

  1) Coated with asphalt based paint or better (except on machined surfaces).

- 2) Cast the heat number on the frame and cover.

  3) Give the frame and cover a machine finish so the cover will not rock.

  4) designates a machine finished surface.
- 5) Cast the words "STORM DRAIN" on the cover in upper case flush with the

### 3. EXECUTION

A. Except in paved streets, provide locking manhole covers in easements, alleys, parking lots, and all other places. Drill and tap two holes to a depth of 1-inch at 90 degrees to pry hole and install 3/4 x 3/4-inch allen socket set screws.

### Catch basin

### 1. GENERAL

A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering

- PRODUCTS
   A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
   C. Concrete: Class 4000, APWA Section 03 30 04.
   D. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A 615.

### 3. EXECUTION

- A. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
- B. Curb Face Opening: Make opening at least 4-inches high. Provide at least a 2-inch
- B. Curb Face Opening: Make opening at least 4-inches high. Provide at least a 2-indrop between the "warp line" in the gutter flow-line and the top of the grate at the curb face opening.
   C. Concrete Placement: APWA Section 03 30 10. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
   D. Backfill: Place backfill against the basin wall. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.

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SINGLE GRATE

### Combination catch basin and cleanout box

### 1. GENERAL

A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the box.

# PRODUCTS A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel

- as a base course without ENGINEER's permission.

  B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.

  C. Concrete: Class 4000, APWA Section 03 30 04.

- C. Concrete: Class 4000; APVIA Section 03 30 04.

  D. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A 615.

  E. Ladder Rungs: Plastic, or plastic coated steel typically 8-inches wide

### 3 EXECUTION

- A. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a
- modified proctor density, APWA Section 31 23 26.

  B. Curb Face Opening: Make opening at least 4-inches high. Provide at least a 2-inch drop between the "begin warp" line in the gutter flow-line and the top of the grate at the curb face opening.

  C. Ladder Rungs: Provide rungs in boxes over 6 feet deep. When measured from the
- floor of the box, place bottom rung the greater distance of 4 feet from the floor of the box or 1 foot above the top of the pipe. Place top rung within 3 feet of bottom of box
- D. Concrete Placement: APWA Section 03 30 10. Provide 1/2-inch radius edges.

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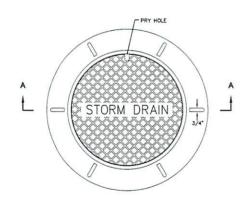
Concrete Placement: APPWA Section 03 30 10. Provide 1/2-inch radius edges.
Apply a broom finish. Apply a curing agent.
 Backfill: Provide backfill against all sides of the box. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density. APWA Section 31 23 26.

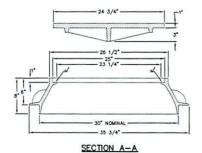
315

March 2011

# TYPE A

132





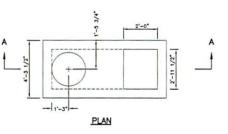
30" Frame and cover 133 September 2001

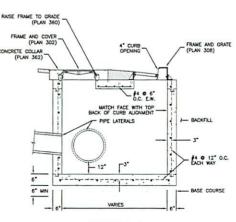
302

PLAN "L" BAR DETAIL FLOW LINE DROP (NOTE 38) Y + 2" MIN INVERT OF GUTTER 'L' BAR-BOTTOM O L'L' BAR DO NOT USE 'L' BARS FOR FRAME SUPPORT - BACKFILL - 3'-11 1/2°-SECTION A-A - 3'-0° --SECTION C-C SECTION B-B

Catch basin

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SECTION A-A

Combination catch basin and cleanout box 159

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S CREEK WATTS ENTERPRISES FAIRWAYS AT WOLF C PHASE 4 & 5

UTAH 8

# Date Issue / Description

STORM DRAIN DETAILS (APWA)

Sheet X of X

### 1. GENERAL

A. Round concrete pipe application.
 B. Additional requirements are specified in APWA Section 33 05 02.

# A. Use the same quality of precast end section as the pipe. B. Use the joint material and connection that is the same as the joints in the pipeline.

### 3. EXECUTION

- A. General dimensions and geometric shapes may vary from manufacturer to manufacturer.
- B. Steel reinforcement is not required in the concrete end section shown.
- C. Provide joint restraint connectors if required by ENGINEER.

### Precast manhole

# 1. GENERAL

- A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering. pipe connection to the manhole.
- Manhole size.
   Manhole size.
   Diameter is 4 feet: For pipe under 12\* diameter.
   Diameter is 5 feet: For pipe 12\* and larger, or when 3 or more drain pipes intersect the manhole.
- C. Wall thickness:
- Precast reinforced concrete walls 4 3/4" minimum.
   Cast-in-place concrete to be 8 inches thick minimum.

### 2. PRODUCTS

- PRODUCTS

  A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.

  B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.

  C. Concrete: Class 4000, APWA Section 03 30 04.

  D. Riser and Reducing Riser: Reinforced concrete pipe, Class III, ASTM C 478.

  E. Joint Sealant: Rubber based, compressible.

- F. Grout: 2 parts sand to 1 part cement mortar.

- EXECUTION
   A. Foundation Stabilization: Get ENGINEER's permission to use a sewer rock or pea
  - A. Foundation Stabilization: Get ENGINEER's permission to use a sewer rock or pergravel to stabilize an unstable foundation.
     B. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.

  - modiled proctor density. ArWA Section 31 23 26.

    Invert cover, During construction, place invert covers over the top of pipe in manholes that currently convey sewerage. See Plan 412.

    D. Concrete Deck or Reducing Riser: When depth of manhole from pipe invert to finish grade exceeds 7 feet, use an ASTM C 478 reducing riser cone.

    E. Pipe Connections: Grout around all pipe openings.

    F. Water Stops: Install rubber-based water-stops on all plastic pipes when connecting stops in the plant of the pipe of of th

  - plastic pipes to manholes. Hold water-stop in place with stainless steel bands.

    G. Joints: Place flexible sealant in all joints. Finish with grout.

    H. Finish: Provide smooth and neal finishes on interior of cones, shafts, and rings.

  - Firmsh: Provide smooth and neat firmshes on interior of cones, sharts, and rings. Imperfect moldings or honeycombs will not be accepted. Backfill: Provide backfill against the manhole shaft. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density. APWA Section 31 23 26.

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PIPE PASS-THROUGH BASE

### Raise frame to grade

### 1. GENERAL

A. Grade rings are used in non-pressurized applications to adjust frame to grade.

### 2. PRODUCTS

- PRODUCTS
  A. Concrete: Class 4000, APWA Section 03 30 04.
  B. Reinforcement: Deformed, 60 ksi yield grade hoop steel, ASTM A 615.
  1) 2 1/2" High Rings: Provide two 1/4" diameter steel hoops tied with No. 14 AWS gage wire, 8" on center.
  2) 6" and 8" High Rings: Provide four 1/4" diameter steel hoops, tied with No. 14 AWS gage wire, 8" on center.
  C. Gasket: Rubber-based, compressible.

### 3. EXECUTION

- A. Ring Manufacture:
   1) Fabrication, APWA Section 03 30 10.
- Cure, APWA Section 03 39 00.
   Field Installation: Seat rings with a compressible gasket.

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**GRADE RING** 

# 170

# **ROUND WITH FLARE**

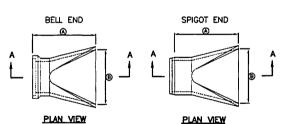




TABLE OF DIMENSION

48° 98° 84°

SECTION A-A



OBLIQUE

November 2010

Pipe outfall

171

323 Sheet 1 of 3

November 2010

A NOTE: INVEST CONNECTION SHOWN IS NOT APPLICABLE LATERAL BAVEST DOES NOT COINCIDE WITH MAIN INVEST (SECTION B-B) FLOW ) TABLE OF DIMENSIONS
MANHOLE DIMENSION
STYLE DIMENSION 6" INCHES MINIMUM
MEASURED ON THE INSIDE
OF THE MANHOLF (TYP) PLAN 2.5" (MIN) ---- BASE COURSE SECTION A-A SECTION B-B

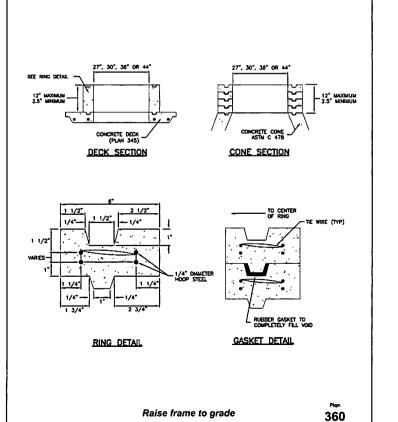
Precast manhole

189

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Sheet 2 of 2

May 2006



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Sheet 1 of 2

**Galloway** 

Trolley Corners Building 515 South 700 East. Suite 3F Salt Lake City, UT 84102 303.770.8884 O www.gallowayUS.com 07 1 to 0 - 1, 2 (11/10 ) 10. MMps. Second

S CREEK WATTS ENTERPRISES FAIRWAYS AT WOLF C PHASE 4 & 5

84310

UTAH

# Date Issue / Description Init.

03:14/2016

SHEET TITLE STORM DRAIN DETAILS (APWA)

**DT05** 

### Cover collar for storm drains

# 1. GENERAL

A. In a pavement surface, the concrete will support the frame under traffic loadings.

- PRODUCTS
   A. Concrete: Class 4000, APWA Section 03 30 04.
  - Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.

### 3. EXECUTION

- A. Pavement Preparation: Provide a neat vertical and concentric joint between concrete and existing asphalt concrete surfaces. Clean edges of all dirt, oil, and
- B. Concrete Placement: APWA Section 03 30 10. Fill the annular space around the frame and cover casting with concrete. Apply a broom finish. Apply a curing agent.

### Trench backfill

### GENERAL

A. The drawing applies to backfilling the trench above the pipe zone.

# 2. PRODUCTS

A. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 3-inches. Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.

# 3. EXECUTION

- A. Trench Backfill:
   DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate as trench
- Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23
- Water jetting is NOT allowed.
- 3) Water jetting is NOT allowed.
  4) Submission of quality control compaction test result data developed for haunching areas may be requested by ENGINEER at any time. Provide results of tests immediately upon request.

  B. Flowable Fill: When required, place controlled low strength material in the trench, APWA Section 31 05 15. Cure the fill before placing surface restorations.

  C. Surface Restoration:
  1) Landscaped Surface: Rake to match existing grade. Replace vegetation to match pre-construction conditions. Follow APWA Section 32 92 00 (turf or grass) or APWA Section 32 93 13 (ground cover) requirements.
  2) Paved Surface: Do not install asphalt or concrete surfacing until trench compaction is acceptable to ENGINEER. Follow APWA Section 33 05 25 (asphalt surfacing), or APWA Section 33 05 25 (concrete surfacing).

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### Pipe zone backfill

A. Install the pipe in the center of the trench or no closer than 6-inches from the wall of the pipe to the wall of the trench.

### 2. PRODUCTS

- Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
- C. Concrete: APWA Section 03 30 04.
  D. Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA
- Section 31 05 15. It must flow easily requiring no vibration for consolidation.

  E. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.

- EXECUTION
   A. Excavate the Pipe Zone: Width is measured at the pipe spring line and includes any necessary sheathing. Provide width recommended by pipe manufacturer. Follow manufacturer's recommendations when using trench boxes.

  B. Foundation Stabilization: Get ENGINEER's permission before installing common fill.
  - Vibrate to stabilize. Installation of stabilization-separation geotextile will be required to separate backfill material and native subgrade materials if common fill cannot provide a working surface or prevent soils migration.

  - C. Base Course:

    1) Furnish untreated base course material unless specified otherwise by pipe manufacturer.
  - 2) Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
- When using concrete, provide at least Class 2,000 per APWA Section 03 30 04.
   Pipe Zone: DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate in the pipe zone. Water jetting is NOT allowed.
   Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26
- unless pipe manufacturer requires more stringent installation.

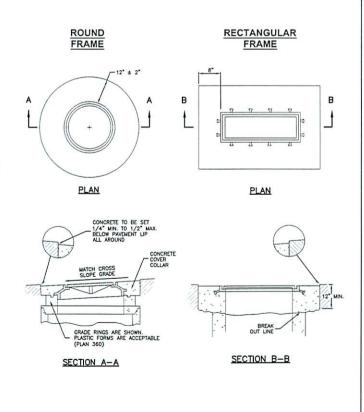
  2) Submission of quality control compaction test result data developed for the haunch zone may be requested by ENGINEER at any time. CONTRACTOR is
- to provide results of tests immediately upon request.

  E. Flowable Fill (when required and if allowed by pipe manufacturer):

  1) Place the controlled low strength material, APWA Section 31 05 15.
- 1) Prevent pipe flotation by installing in lifts and providing pipe restraints as required by pipe manufacturer.

  3) Reset pipe to line and grade if pipe "floats" out of position.

204

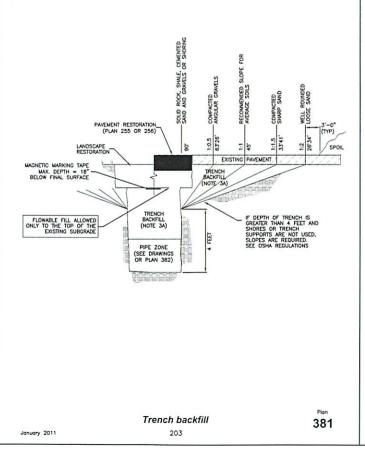


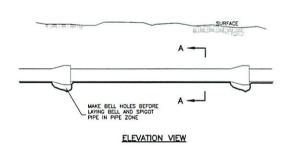
Cover collar for storm drains

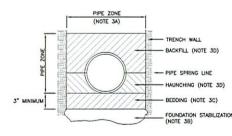
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December 2010

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SECTION A-A

INSTALLATION

January 2011

CONCRETE PIPE: FOLLOW ASTM C 1479
STIMEND PRICTICE FOR INSTALLATION OF PRECISE CONCRETE STIMEN, STORM DRAIN, AND CLUMENT PIPE USING STANDARD

PVC AND HDPE PIPE: FOLLOW ASTM D 2321 STREAM PROCESS FOR INDICATOR IND

CORRUGATED METAL PIPE: FOLLOW ASTM A 798 VITRIFIED CLAY PIPE: FOLLOW ASTM C 12. STANDARD RECOMMENDED PRACTICE FOR INSTALLING VITRIED CLAY PIPE UNITS

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Pipe zone backfill

382

WATTS ENTERPRISES FAIRWAYS AT WOLF CREEK PHASE 4 & 5

84310

UTAH

Galloway

Trolley Corners Building 515 South 700 East, Suite 3F Salt Lake Ciry, UT 84102 303.770.8884 O www.gallowayUS.com

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Project No:	WAT01,01
Drawn By:	JST
Checked By:	RMP
Date:	03/14/2016

SHEET TITLE: STORM DRAIN DETAILS (APWA)

