

Memorandum

Department of Public Works
City Engineer Division
Survey Section
333 North Rancho Dr., 8th Floor
Las Vegas, Nevada 89106

Phone (702) 229-6217
Fax (702) 804-8582

To: Michael Cunningham, Manager
Building and Safety Department

From: Alan R. Riecki, PLS
City Surveyor

C: Ross J. Doyle, PLS
Tri-Core Surveying

Tim Parks, P.E., Engineering Project Manager
Sanitary Sewers Section, Engineering Planning

Date: August 28, 2017

Re: Sanitary Sewer Final Location Map
BLM SITE 11 EAST ON-SITE
(Drawing No. 107Y5050-1, L-Civil No. 68388)

The Survey Section has reviewed the Final Location Map and as far as our jurisdiction of this project is concerned, we find that the map is:

Acceptable: August 28, 2017


Signature

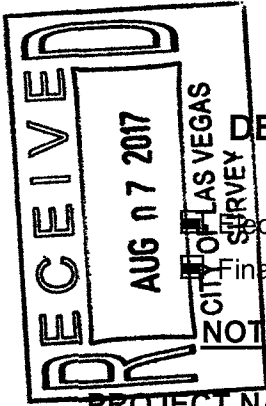
City Surveyor
Title

Public Works/Survey
Department/Division

ARR/OS:js

CITY OF LAS VEGAS
BUILDING AND SAFETY DEPARTMENT

OFFSITE INSPECTION & TESTING
333 NORTH RANCHO DRIVE
LAS VEGAS, NV 89106
PHONE: (702) 229-6337
FAX: (702) 631-3000



DEVELOPER'S SUBMITTAL OF LOCATION COORDINATES

Sewer Storm Drain

Electronic Comma Delineated File
 Final Location Map (2 copies each for either sewer OR storm drain)

NOTE: THE TOP PART OF THIS FORM MUST BE FILLED OUT IN ITS ENTIRETY

PROJECT NAME: BLM SITE 11 EAST ON-SITE IMPROVEMENT PLANS UNIT: PHASE:

PROJECT LOCATION: Tropical Parkway and Alpine Ridge Way in Las Vegas, NV

CLV PLAN #: 107Y5050-1 CLV PROJECT # 68388 SHEET NO. (S): 6-11 of 15

OF MANHOLES 3 PUB. SEWER/STORM DRAIN LIN. FT. # OF PRIVATE LATERALS

DEVELOPER: DR Horton PHONE: 702-635-3600 FAX: 800-538-0735

SURVEY CO.: Tri-Core Surveying PHONE: 702-821-1554 FAX: 702-870-4378

CONTRACTOR: KNL Construction PHONE: 702-726-0101 FAX: 702-253-1768

CONTRACTOR'S SUPERVISOR NAME: Greg Walker MOBILE: 702-726-0101

DATE OF REQUEST: July 24, 2017

SUBMIT DIRECTLY TO THE OFFICE OF THE CITY SURVEYOR LOCATED ON THE 8th FLOOR OF THE DSC / 333 N Rancho, 89106

Please get a stamped copy of this form for your records.

CITY USE ONLY

DATE AND INITIALS / RECEIVED BY THE CITY SURVEYOR _____

ACCEPTABLE BY CITY SURVEYOR DATE: 8/28/17 NOT ACCEPTABLE BY CITY SURVEYOR DATE _____

CLV SURVEYOR'S SIGNATURE: DATE: 8/28/17

THE CITY OF LAS VEGAS RECOMMENDS THAT ALL DEFICIENCIES NOTED ON THE ATTACHED SURVEY REPORT BE CORRECTED PRIOR TO THE FINAL ACCEPTANCE.

Notes: _____

ROUTING:

- > Once "ACCEPTABLE"; SURVEY to forward a copy of this form to O.I.T. for the file.
- > Final Location Maps to be forwarded to and retained by Flood Control or Sanitation Engineer respectively.



City of Las Vegas
Department of Public Works
Survey Section

REVIEW CHECKLIST
SANITARY SEWER
FINAL LOCATION MAP

JOB NUMBER H68388 SS1
 PROJECT NAME BLM SITE 11 EAST ON-SITE
 WORK AUTH. NO. P28000
 SUBMITTED BY Tri-Core Surveying(Ross J. Doyle)
 PROJECT TYPE CIP Land Dev Street Rehab
 DATE 8/28/17
 REVIEWED BY D. SANTANA

REVIEW DETERMINATION

- Approved
- Not Acceptable

TO BE RE-SUBMITTED

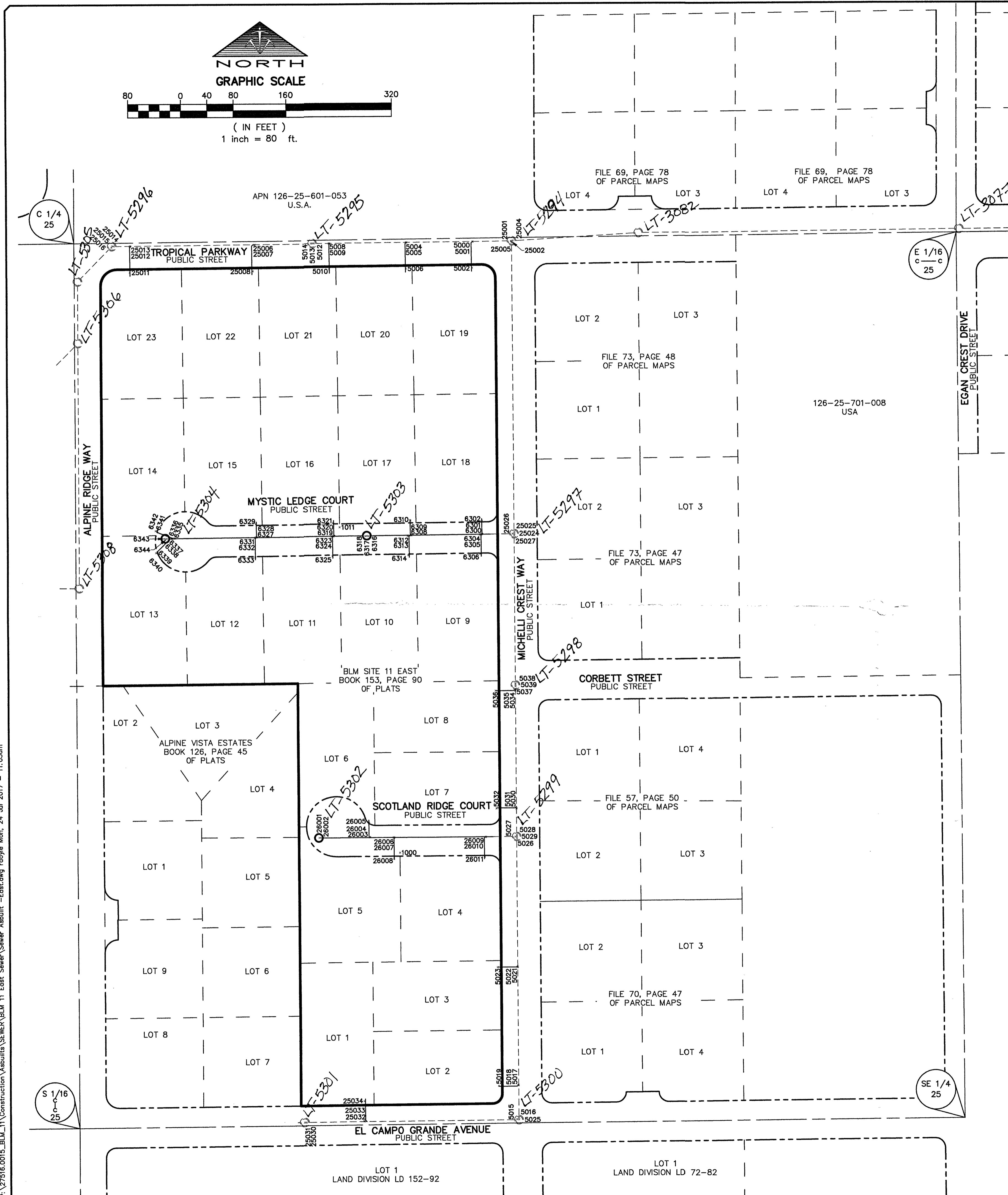
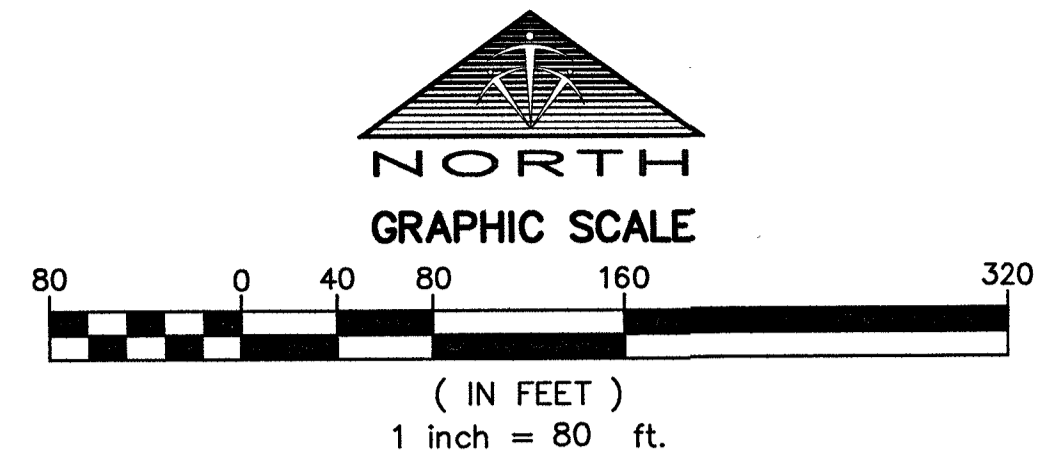
- Two bond copies (no mylar)
- Electronic media with comma-separated coordinate file

REVIEW ITEM	OK	SEE R/L	N/A	COMMENTS
Submittal Contents				
Two bond copies (no mylar)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Electronic media containing comma-separated coordinate file	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
General Map Contents				
Sheet size 24" x 36"	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sheet number and number of sheets	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
North arrow (pointing up, left or right)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Scale (written & graphic, correctly shown, appropriate scale used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lettering legibility (minimum text size 0.08")	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Map title shown ("Sanitary Sewer Final Location Map")	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CLV project name shown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CLV Hansen No. shown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CLV Drawing No. shown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Preparer's company name and contact information shown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Legend (all linetypes and symbols defined)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Non-standard abbreviations defined	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Distances, coordinates and elevations labeled using decimal feet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Approximate limits of streets shown (improvements or right-of-way)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Street names labeled (identified as public or private)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

REVIEW CHECKLIST – SANITARY SEWER FINAL LOCATION MAP

REVIEW ITEM	OK	SEE R/L	N/A	COMMENTS
Sanitary Sewer Improvements Data				
*NOTE As of December 1, 2015 manhole cover locations are no longer required.				
Manhole Barrel/Base: (measured horizontally at centerline of structure barrel/base, vertical location does not apply)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Vaults and Junction Structures: (measured horizontally at all outer extents of structure, vertically at top of structure)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Lateral/Main/Interceptor Pipes: locate at all connections to other pipes and structures, all horizontal and vertical deflections, points of termination (stubs), point at which pipe exits the public right-of-way or easement (measured horizontally at centerline of pipe, vertically at top of pipe)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*NOTE All pipe connections to manholes and other structures should be located at outside face of structure before backfilling due to accuracy limitations of pipe measurements from the structure's surface access point.				
Coordinate Information				
Data acquisition completion date indicated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coordinate system indicated (only CLV approved coordinate systems are to be used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Horizontal datum, datum adjustment, and epoch date indicated (only CLV approved datums are to be used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Benchmark ID, description, elevation indicated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Statement of positional accuracy per the tolerances indicated below	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*NOTE For all projects with improvement plans approved prior to March 1, 2015 coordinates provided must be accurate to within ±0.5 feet horizontally and vertically. For all projects with improvement plans approved after March 1, 2015 coordinates provided must be accurate to within ±0.3 feet horizontally and vertically.				
Coordinate accuracy QA/QC (when available)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

ADDITIONAL COMMENTS



POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1000	26799053.94	733062.24	0.00	SCRIBED X ● LOT 4/5
1011	26799545.96	732969.89	0.00	SCRIBED X ● LOT 16/17
5000	26799977.73	733172.29	2795.48	TOP 8" PVC MAIN
5001	26799977.34	733172.48	2795.74	TOP 4" PVC LATERAL
5002	26799938.15	733171.61	2802.45	TOP 4" PVC LATERAL
5004	26799976.30	733071.85	2801.65	TOP 8" PVC MAIN
5005	26799975.75	733071.25	2801.66	TOP 4" PVC LATERAL
5006	26799936.52	733071.25	2808.38	TOP 4" PVC LATERAL
5008	26799974.54	732953.33	2808.94	TOP 8" PVC MAIN
5009	26799974.09	732952.80	2809.03	TOP 4" PVC LATERAL
5010	26799935.00	732953.47	2814.89	TOP 4" PVC LATERAL
5012	26799974.26	732930.40	2810.14	TOP 8" PVC MAIN OUT
5013	26799974.15	732927.92	2809.62	SSMH CL BARREL
5014	26799974.12	732925.76	2810.39	TOP 8" PVC MAIN IN
5015	26798651.34	733240.89	2797.34	TOP 8" PVC MAIN IN
5016	26798653.97	733243.62	2797.14	TOP 8" PVC MAIN OUT
5017	26798703.11	733243.18	2797.06	TOP 8" PVC MAIN
5018	26798702.54	733242.58	2797.19	TOP 4" PVC LATERAL
5019	26798701.82	733213.20	2798.20	TOP 4" PVC LATERAL
5021	26798881.63	733241.90	2796.52	TOP 8" PVC MAIN
5022	26798881.11	733241.29	2796.43	TOP 4" PVC LATERAL
5023	26798881.22	733211.07	2798.30	TOP 4" PVC LATERAL
5025	26798651.19	733243.84	2797.67	SSMH CL BARREL
5026	26799076.28	733240.31	2795.84	TOP 8" PVC MAIN IN
5027	26799078.59	733237.63	2795.88	TOP 8" PVC MAIN IN
5028	26799081.34	733240.03	2795.77	TOP 8" PVC MAIN OUT
5029	26799078.86	733240.19	2795.05	SSMH CL BARREL
5030	26799122.02	733239.69	2795.55	TOP 8" PVC MAIN
5031	26799121.43	733239.28	2795.62	TOP 4" PVC LATERAL
5032	26799121.19	733209.03	2800.55	TOP 4" PVC LATERAL
5034	26799299.80	733237.99	2794.92	TOP 8" PVC MAIN
5035	26799299.23	733237.44	2795.11	TOP 4" PVC LATERAL
5036	26799299.34	733207.47	2799.26	TOP 4" PVC LATERAL
5037	26799306.12	733237.90	2794.86	TOP 8" PVC MAIN IN
5038	26799310.56	733237.64	2794.82	TOP 8" PVC MAIN OUT
5039	26799308.38	733237.70	2794.20	SSMH CL BARREL
6300	26799536.10	733186.55	2796.25	TOP 8" PVC MAIN
6301	26799536.71	733186.04	2796.43	TOP 4" PVC LATERAL
6302	26799556.25	733186.75	2800.33	TOP 4" PVC LATERAL
6304	26799536.00	733183.80	2796.35	TOP 8" PVC MAIN
6305	26799535.35	733183.36	2796.53	TOP 4" PVC LATERAL
6306	26799506.47	733184.32	2800.69	TOP 4" PVC LATERAL
6308	26799533.99	733079.53	2801.18	TOP 8" PVC MAIN
6309	26799534.62	733078.86	2801.23	TOP 4" PVC LATERAL
6310	26799556.25	733078.12	2804.52	TOP 4" PVC LATERAL
6312	26799533.91	733074.53	2801.32	TOP 8" PVC MAIN
6313	26799533.21	733074.01	2801.51	TOP 4" PVC LATERAL
6314	26799504.40	733075.07	2805.57	TOP 4" PVC LATERAL
6316	26799532.88	733013.79	2804.02	TOP 8" PVC MAIN OUT
6317	26799532.92	733011.16	2803.53	SSMH CL BARREL
6318	26799532.80	733008.68	2804.32	TOP 8" PVC MAIN IN
6319	26799532.22	732960.44	2806.82	TOP 8" PVC MAIN
6320	26799532.84	732959.93	2806.93	TOP 4" PVC LATERAL
6321	26799552.46	732959.80	2809.27	TOP 4" PVC LATERAL
6323	26799532.11	732958.05	2807.06	TOP 8" PVC MAIN
6324	26799531.47	732957.51	2807.11	TOP 4" PVC LATERAL
6325	26799502.25	732959.24	2809.34	TOP 4" PVC LATERAL
6327	26799530.80	732844.33	2812.20	TOP 8" PVC MAIN
6328	26799531.47	732843.74	2812.26	TOP 4" PVC LATERAL
6329	26799551.12	732843.30	2814.59	TOP 4" PVC LATERAL
6331	26799530.75	732842.20	2812.39	TOP 8" PVC MAIN
6332	26799530.05	732841.42	2812.58	TOP 4" PVC LATERAL
6333	26799500.78	732842.46	2814.34	TOP 4" PVC LATERAL
6335	26799528.80	732720.28	2818.13	TOP 8" PVC MAIN
6336	26799529.43	732719.69	2818.21	TOP 4" PVC LATERAL
6337	26799528.67	732716.13	2818.37	TOP 8" PVC MAIN
6338	26799528.24	732715.61	2818.38	TOP 4" PVC LATERAL
6339	26799508.68	732694.12	2820.19	TOP 4" PVC LATERAL
6340	26799508.89	732691.94	2823.00	TOP 4" PVC LATERAL
6341	26799539.49	732693.55	2820.16	TOP 4" PVC LATERAL
6342	26799540.13	732691.06	2823.10	TOP 4" PVC LATERAL
6343	26799528.35	732705.34	2818.31	SSMH CL BARREL
6344	26799528.32	732708.19	2818.76	TOP 8" PVC MAIN OUT
25001	26799978.70	733230.44	2791.42	INV IN ● SSMH
25002	26799978.43	733231.16	2791.38	SSMH CL BARREL

LEGEND

- SUBDIVISION BOUNDARY LINE
- - - LOT LINE / ASSESSOR'S PARCEL LINE
- PRIVATE STREET LINE
- - - RIGHT-OF-WAY LINE
- MATCHLINE
- SEWER LINE
- - - EXISTING SEWER LINE
- SEWER MANHOLE
- EXISTING SEWER MANHOLE
- 5100 AS-BUILT POINT NUMBER

HORIZONTAL DATUM
 HORIZONTAL DATUM SHOWN HEREON IS BASED UPON NORTH AMERICAN DATUM OF 1983 (NA83 (2011) EPOCH 2010.00 REALIZATION), NEVADA STATE PLANE COORDINATE SYSTEM EAST ZONE (2701).

BENCHMARK
 CITY OF LAS VEGAS BENCHMARK: 1C9925SSWS6
 RIVET & SQUARE ALUMINUM PLATE IN NORTHEAST CORNER OF A CONCRETE BASE OF LARGE POWER POLE (#40-8) AT THE WEST END OF ANN ROAD.
 ELEVATION: 2,888.33 (U.S. SURVEY FEET)
 880.365 (METERS)

BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD '88), CITY OF LAS VEGAS 2008 ADJUSTMENT

NOTES
 THE PURPOSE OF THIS SURVEY IS TO PROVIDE AS-BUILT INFORMATION FOR THE SANITARY SEWER FACILITIES IN "BLM SITE 11 EAST", BOOK 153, PAGE 90 OF PLATS, SITUATE IN THE NORTHWEST QUARTER (NW 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 25, TOWNSHIP 19 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AND THE SURVEY WAS COMPLETED ON JULY 19, 2017.
 THE POSITIONAL CERTAINTY OF THE AS-BUILT INFORMATION SHOWN HEREON IS WITHIN +/- 0.3' HORIZONTALLY AND VERTICALLY.

TRI-CORE SURVEYING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITIES SHOWN OR NOT SHOWN. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FOR THE CONVENIENCE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY BOTH THE HORIZONTAL AND VERTICAL LOCATION OF ALL RELEVANT UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. IF A CONFLICT OR DISCREPANCY IS DISCOVERED, THE CONTRACTOR SHALL NOTIFY TRI-CORE SURVEYING IN WRITING IMMEDIATELY.

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
25004	26799979.27	733233.40	2791.96	TOP 8" PVC MAIN OUT
25005	26799976.45	733231.57	2792.12	TOP 8" PVC MAIN IN
25006	26799972.57	732840.65	2813.69	TOP 8" PVC MAIN
25007	26799971.98	732839.86	2813.72	TOP 4" PVC LATERAL
25008	26799932.55	732838.09	2816.86	TOP 4" PVC LATERAL
25011	26799929.79	732851.41	2824.18	TOP 4" PVC LATERAL
25012	26799969.26	732851.09	2820.40	TOP 4" PVC LATERAL
25013	26799969.91	732851.94	2820.28	TOP 8" PVC MAIN
25014	26799969.42	732826.98	2821.08	TOP 8" PVC MAIN OUT
25015	26799969.58	732824.67	2821.24	SSMH CL BARREL
25016	26799967.63	732823.20	2821.45	TOP 8" PVC MAIN IN
25024	26799536.48	733235.95	2793.45	SSMH CL BARREL
25025	26799539.28	733235.96	2794.08	TOP 8" PVC MAIN OUT
25026	26799537.01	733233.32	2794.27	TOP 8" PVC MAIN IN
25027	26799534.53	733235.77	2794.12	TOP 8" PVC MAIN IN
25030	26799864.95	732920.46	2809.43	TOP 8" PVC MAIN OUT
25031	26799864.56	732917.78	2808.88	SSMH CL BARREL
25032	26799864.65	733008.24	2806.12	TOP 8" PVC MAIN
25033	26799864.25	733007.38	2806.10	TOP 4" PVC LATERAL
25034	26799867.28	733008.20	2808.16	TOP 4" PVC LATERAL
26001	26799076.15	732939.80	2807.59	SSMH CL BARREL
26002	26799076.17	732942.06	2808.01	TOP 8" PVC MAIN OUT
26003	26799077.01	733016.67	2804.88	TOP 8" PVC MAIN
26004	26799077.68	733016.13	2804.92	TOP 4" PVC LATERAL
26005	26799098.91	733015.09	2806.46	TOP 4" PVC LATERAL
26006	26799077.27	733052.84	2803.40	TOP 8" PVC MAIN
26007	26799076.62	733052.35	2803.53	TOP 4" PVC LATERAL
26008	26799044.45	733053.22	2805.31	TOP 4" PVC LATERAL
26009	26799078.45	733193.29	2797.90	TOP 8" PVC MAIN
26010	26799077.83	733192.69	2797.95	TOP 4" PVC LATERAL
26011	26799047.47	733191.50	2799.74	TOP 4" PVC LATERAL

DATE: 7/24/2017
 DRAWN BY: RD
 DESIGNED BY: GS
 CHECKED BY: GS
 ADJ. CHECKED: GS
 JOB NO.: 27916.0015
 SCALE: 1"=80'
 NO. DESCRIPTION DATE APP'D

TRI-CORE SURVEYING, LLC
 LAND SURVEYING · CONSTRUCTION STAKING
 MAPPING & LAND DEVELOPMENT SERVICES
 BOUNDARY & TOPOGRAPHIC SURVEYS
 6761 WEST CHARLESTON BLVD.
 LAS VEGAS, NEVADA 89146
 TEL (702) 821-1554 FAX (702) 870-4378

DR HORTON
 BLM SITE 11 EAST
 SANITARY SEWER FINAL LOCATION MAP

7/24/17

SHEET
1
 OF 1

CLV PROJECT H#68388
 CLV DRAWING #107Y5050-1
 FMP-68005

P:\27916.0015_BLM_11\Construction\A\ublas\SEWER\BLM_11_East_Sewer_Sewer_Abbuilt - East.dwg rdcoyle Mon, 24 Jul 2017 11:03am