

UTILITY NOTE:
LOCHSA ENGINEERING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS PLAN ARE FROM THE BEST AVAILABLE INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES, INCLUDING BUT NOT LIMITED TO, THE WATER, FIRE, SANITARY SEWER, STORM SEWER, TELEPHONE, POWER, GAS, AND IRRIGATION LINES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IF CONFLICT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE PROJECT ARCHITECT, OWNER'S REPRESENTATIVE AND THE PROJECT ENGINEER IMMEDIATELY.

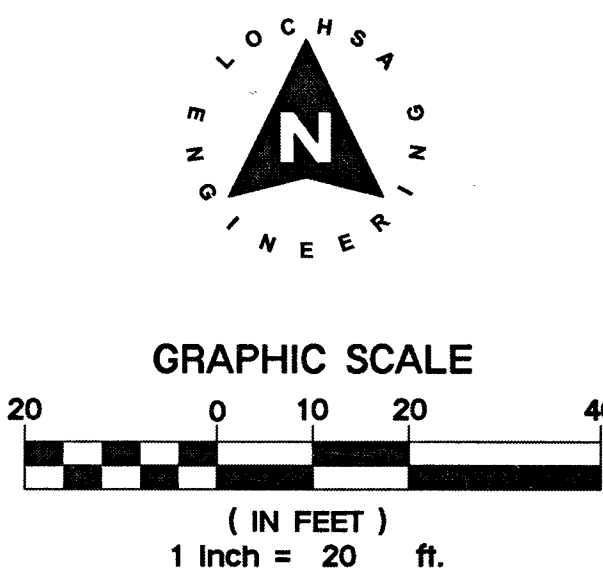
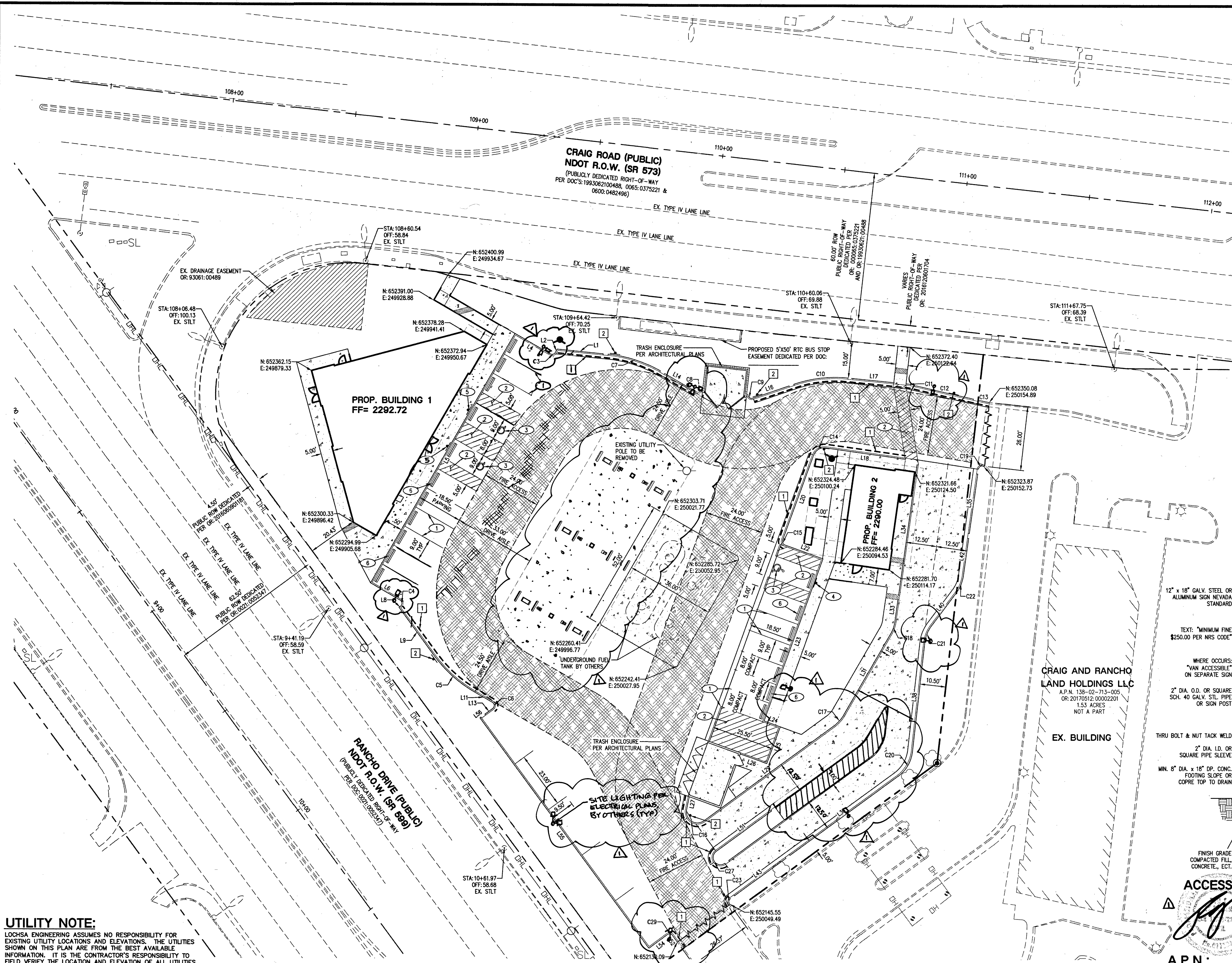
Call before you Dig
Avoid cutting underground utility lines. It's costly.

FAST!
Call before you Dig
Underground

Call before you Dig
Avoid hitting overhead power lines. It's costly.

1-800-227-2800
1-702-432-5300
1-702-227-2929

LEGEND	CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	BUILDING OUTLINE	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	CONTOUR LINES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	100W HPS STREETLIGHTS	150W HPS STREETLIGHTS	200W HPS STREETLIGHTS	250W HPS STREETLIGHTS	400W HPS STREETLIGHTS
	PROPERTY LINE	SAWCUT LINE	EXISTING:						(2210)			(12.34)		⊙	⊙ = SANITARY SEWER ⊙ = STORM DRAIN ⊙ = ELECTRICAL ⊙ = TELEPHONE										
	ROW LINE	SCARP LINE	PROPOSED:						(2122)			(12.34) BC		⊙											



- SIGNAGE & STRIPING NOTES:**
1. INSTALL 9' X 18' PARKING WITH 4" WHITE PAINTED LINES. (TYPICAL)
 2. INSTALL 4" WHITE PAINTED HATCH LINES 3' O.C. @ 45°.
 3. INSTALL BLUE AND WHITE PAINTED HANDICAP PAVEMENT MARKINGS. PER DETAIL 9 ON C8.01.
 4. INSTALL R7-8 "MINIMUM \$250 FINE FOR USE BY OTHERS" NRS 484.408 SIGN (12" X 18") PER DETAIL THIS SHEET.
 5. INSTALL R7-8 "MINIMUM \$250 FINE FOR USE BY OTHERS" NRS 484.408 SIGN "VAN ACCESSIBLE (12" X 18") PER DETAIL THIS SHEET.
 6. INSTALL PRECAST BUMPER BLOCK 2' AWAY FROM CURB FACE PER DETAIL 10 ON C6.01.

RAISED PAVEMENT MARKERS:
INSTALL BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS (RPM) ADJACENT TO THE FIRE HYDRANT ON ALL IMPROVED FIRE APPARATUS ACCESS ROADWAYS WITH HARD SURFACES, INCLUDING BOTH PUBLIC AND PRIVATE ROADS, STREETS, OR FIRE LANES.

ON ROADWAYS WITH NO PARKING PERMITTED ON THE HYDRANT SIDE: EIGHT (8) FEET FROM THE FACE OF THE CURB ON THE HYDRANT SIDE.

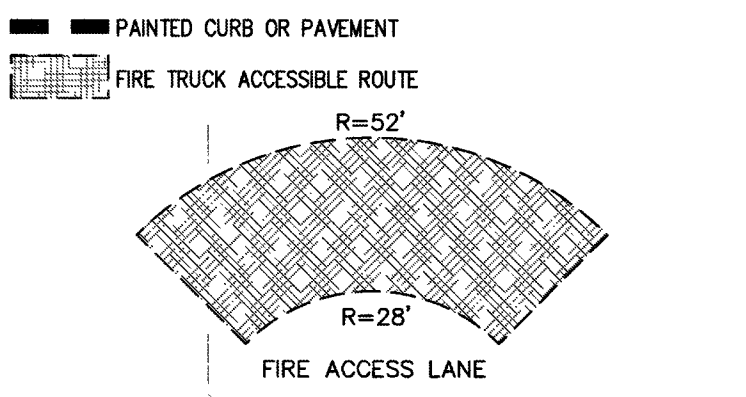
ON ROADWAYS WITH PARKING PERMITTED ON THE HYDRANT SIDE: (16) FEET FROM THE FACE OF THE CURB ON THE HYDRANT SIDE.

HORIZONTAL CONTROL NOTE:
ALL DIMENSIONS SHOWN ARE TO BACK OF CURB UNLESS NOTED OTHERWISE ON PLANS.

SIGHT VISIBILITY ZONE (SVZ)
SIGHT VISIBILITY ZONE AREA
NOTE:
NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECTS OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LEAST 14' MIN. HEIGHT, MEASURED FROM TOP OF CURB OR WHERE NO CURB EXISTS, A HEIGHT OF 27' MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH UNLANDSCAPED MEDIANS.

FIRE ACCESS NOTES/ LEGEND:

1. PAINTED WHITE BLOCK LETTERS NO LESS THAN 4" IN HEIGHT STATE "NO PARKING FIRE LANE" PER FIRE SAFETY DIVISION'S UNIFORM GUIDELINES.
2. INSTALL FIRE SIGN @ A MAXIMUM DISTANCE OF EVERY 100' ALONG THE FIRE LANE PER DETAIL THIS SHEET.



ACCESSIBLE PARKING SIGN

A.P.N.:
138-02-713-006

BASIS OF BEARINGS:
THE BASIS OF BEARINGS FOR THIS SURVEY IS THE SOUTHERLY LINE OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 2, TOWNSHIP 20 SOUTH, RANGE 60 EAST M.D.M. AS SHOWN ON THAT MAP ON FILE IN FILE 192, PAGE 31 OF SURVEYS IN THE CLARK COUNTY RECORDERS' OFFICE.

SAID LINE BEARS: NORTH 83°42'46" WEST.

BENCHMARK:
BENCHMARK NO 5LV002E4

CITY OF LAS VEGAS BENCHMARK.
RIVET AND PLATE IN TOP OF CURB AT THE NORTHWEST CORNER OF CRAIG ROAD AND JONES BOULEVARD.
ELEVATION=2261.88 FEET / 689.423 METERS
(NAVD 88 DATUM)

PROJECT No.: 181119
DATE: 10/01/18
SCALE: 1" = 20'
DRAWN BY: BJB
DESIGNED BY: BJB
CHECKED BY: TTE

12/5/18
SHEET No. 3 of 7
OFFSITE No. L18-02525

7-11 @ CRAIG & RANCHO
SITE IMPROVEMENTS
LAS VEGAS, NEVADA

Lochsa
engineering

6445 South Jones Blvd
Las Vegas, NV 89118
Phone (702) 365-9312
Fax (702) 365-9317
www.lochsa.com

REVISIONS
4-1-19 BJB CONCRETE PAVEMENT, LANE, AND CURB IMPROVEMENTS

12/5/2018 10:50 AM
T:\CADD\18119 Drawings\Plan Drawings\18119-3-01-HC.dwg

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CL OR SURVEY LINE	_____
PROPERTY LINE	-----
ROW LINE	=====

EASEMENT LINE	_____
SAWCUT LINE	~~~~~
SCARP LINE	=====

DESCRIPTION:	BUILDING OUTLINE	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS
EXISTING:		---	=====	=====
PROPOSED:		---	=====	=====

WALLS	CONTOUR LINES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS
=====	---(2210)---	=====	=====	(12.30) BC
=====	---(2122)---	=====	=====	12.34 BC

MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	100w HPS STREETLIGHTS	150w HPS STREETLIGHTS	200w HPS STREETLIGHTS	250w HPS STREETLIGHTS	400w HPS STREETLIGHTS
⊙	⊙ = SANITARY SEWER ⊙ = STORM DRAIN ⊙ = ELECTRICAL ⊙ = TELEPHONE	⊙	⊙	▷	○	□	⊙	⊙	⊙	⊙	⊙

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⊙	⊙ = SANITARY SEWER ⊙ = STORM DRAIN ⊙ = ELECTRICAL ⊙ = TELEPHONE	⊙	⊙	▷	○	□	⊙	⊙	⊙	⊙	⊙

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⊙	⊙ = SANITARY SEWER ⊙ = STORM DRAIN ⊙ = ELECTRICAL ⊙ = TELEPHONE	⊙	⊙	▷	○	□	⊙	⊙	⊙	⊙	⊙

LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	18.80'	N84°27'41"W
L2	1.59'	S29°59'26"W
L4	16.50'	N60°00'34"W
L5	117.50'	S29°59'26"W
L6	13.90'	S60°00'34"E
L8	0.69'	S53°42'06"W
L9	24.70'	S36°18'16"E
L11	8.41'	S60°00'34"E
L13	3.94'	S53°41'44"W
L14	14.71'	S60°00'00"E
L16	15.80'	N71°04'39"E
L17	16.71'	S84°27'41"E
L18	32.76'	N82°00'38"W
L20	36.96'	S19°56'59"W
L22	16.50'	S70°03'01"E
L23	70.00'	S19°56'59"W
L24	7.00'	S70°03'01"E
L25	16.00'	S19°56'59"W
L26	11.63'	N70°03'01"W
L27	5.37'	S11°40'24"W

LINE TABLE		
LINE #	LENGTH	DIRECTION
L29	65.56'	N53°42'06"E
L31	37.96'	N30°00'00"E
L33	8.79'	N07°59'48"E
L34	53.55'	N07°59'48"E
L35	24.56'	N07°59'48"E
L36	54.54'	N53°42'06"E
L38	44.41'	N06°25'33"E
L40	16.73'	N36°45'03"E
L42	15.14'	N07°59'48"E
L43	26.00'	N53°42'06"E
L44	71.28'	N53°42'06"E
L46	9.94'	N06°25'33"E
L48	13.77'	S30°00'00"W
L50	41.67'	S53°42'06"W
L51	28.00'	N53°42'06"E
L52	3.32'	N36°15'50"W
L54	9.28'	S53°41'44"W
L55	116.00'	N36°18'16"W
L56	0.50'	N53°41'44"E
L97	20.55'	N15°59'37"W

LINE TABLE		
LINE #	LENGTH	DIRECTION
L98	36.16'	N05°12'10"W
L99	5.52'	N05°31'55"W
L100	8.00'	S84°28'05"W
L101	12.25'	N05°31'55"W
L102	37.00'	S84°28'05"W
L103	17.72'	S05°31'55"E
L104	17.72'	N05°31'55"W
L105	55.00'	S84°28'05"W
L106	17.72'	S05°31'55"E
L107	17.72'	N05°31'55"W
L108	69.00'	S84°28'05"W
L109	23.34'	S05°31'55"E
L110	17.75'	S81°46'50"W
L111	16.50'	N79°46'59"E
L112	16.49'	S79°33'16"W
L113	16.51'	N77°56'59"E
L114	16.51'	S77°43'16"W
L115	17.01'	N75°45'25"E
L116	22.04'	S15°59'38"E
L117	64.00'	N74°00'22"E

CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	TANGENT
C3	2.36'	1.50'	090°00'00"	1.50'
C4	2.98'	1.50'	113°42'40"	2.30'
C5	21.72'	52.50'	023°42'18"	11.02'
C6	2.98'	1.50'	113°42'18"	2.30'
C7	22.41'	52.50'	024°27'41"	11.38'
C8	2.98'	1.50'	113°40'19"	2.30'
C9	3.01'	1.50'	114°51'04"	2.35'
C10	22.41'	52.50'	024°27'41"	11.38'
C11	1.49'	10.50'	008°07'02"	0.75'
C12	24.06'	1362.70'	001°00'43"	12.03'
C13	4.62'	1362.70'	000°11'40"	2.31'
C14	6.13'	4.50'	078°02'24"	3.65'
C15	2.36'	1.50'	090°00'00"	1.50'
C16	10.84'	4.50'	137°58'18"	11.71'
C17	6.00'	14.50'	023°42'06"	3.04'
C18	5.57'	14.50'	022°00'12"	2.82'
C19	3.01'	1.50'	114°52'01"	2.35'
C20	11.96'	14.50'	047°16'33"	6.35'
C21	7.67'	14.50'	030°19'30"	3.93'
C22	7.78'	15.50'	028°45'15"	3.97'

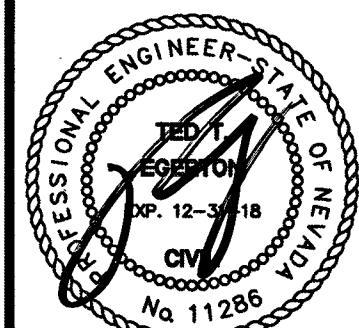
CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	TANGENT
C23	2.51'	1.50'	095°54'54"	1.66'
C24	11.96'	14.50'	047°16'33"	6.35'
C25	1.37'	0.50'	156°25'33"	2.40'
C26	6.00'	14.50'	023°42'06"	3.04'
C27	9.42'	3.00'	180°00'00"	INFINITY
C29	2.36'	1.50'	090°02'26"	1.50'
C57	15.68'	10.00'	089°50'05"	9.97'
C58	19.78'	105.00'	010°47'27"	9.92'
C59	75.58'	52.50'	082°29'18"	46.03'
C60	4.30'	3.00'	082°09'33"	2.62'
C61	7.85'	2.50'	180°00'03"	395630.52'
C62	7.85'	2.50'	180°00'02"	418806.80'
C63	3.81'	2.50'	087°18'45"	2.39'
C64	46.63'	1331.09'	002°00'26"	23.32'
C65	7.87'	2.51'	179°57'04"	5879.66'
C66	37.52'	1331.09'	001°36'54"	18.76'
C67	7.84'	2.50'	179°44'17"	1092.84'
C68	46.63'	1331.09'	002°00'26"	23.32'
C69	3.85'	2.50'	088°14'57"	2.42'
C70	7.85'	2.50'	180°00'00"	INFINITY

CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	TANGENT
C71	3.93'	2.50'	090°00'01"	2.50'
C72	3.93'	2.50'	090°00'00"	2.50'
C73	4.23'	2.50'	096°53'02"	2.82'
C74	85.91'	27.50'	178°59'37"	3131.14'
C75	24.48'	130.00'	010°47'27"	12.28'
C76	15.26'	10.00'	087°26'14"	9.96'
C77	4.17'	2.50'	095°32'54"	2.75'
C78	3.93'	2.50'	090°00'00"	2.50'
C79	35.68'	27.50'	074°20'01"	20.85'
C80	4.61'	2.50'	105°39'59"	3.30'
C81	3.93'	2.50'	090°00'00"	2.50'
C82	9.36'	9.50'	056°26'45"	5.10'
C83	1.35'	9.50'	008°09'27"	0.68'

IMPROVEMENT PLANS LINE & CURVE TABLES

7-11 © CRAIG & RANCHO
SITE IMPROVEMENTS
LAS VEGAS, NEVADA

SHEET	181119
DATE:	10/01/18
SCALE:	NTS
DRAWN BY:	BJB
DESIGNED BY:	BJB
CHECKED BY:	TTE



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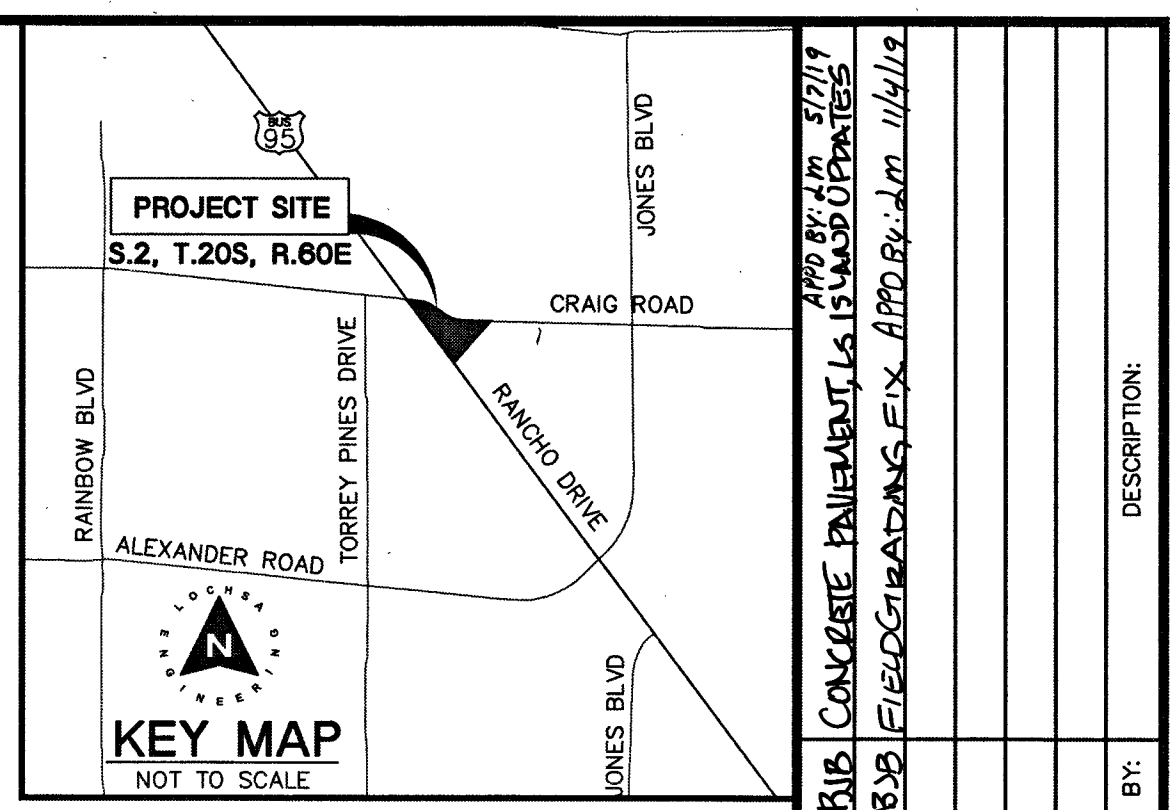
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DESIGNED BY:	BJB
CHECKED BY:	TTE

PROJECT No.:</



- CONSTRUCTION NOTES:**
- 1. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH "CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS (C.C.A.U.S.D.)" LATEST EDITION AND/OR REGULATING ENTITY HAVING JURISDICTION.
 - 2. NOT ALL NOTES USED ON THIS SHEET.
 - 3. CONSTRUCT "A" TYPE CURB PER DETAIL 1 ON C6.01.
 - 4. CONSTRUCT "L" TYPE CURB PER DETAIL 1 ON C6.01.
 - 5. CONSTRUCT CONC. SIDEWALK PER DETAIL 9 ON C6.01. REFER TO ARCH. PLANS FOR FINISHING SPECIFICATIONS.
 - 6. CONSTRUCT 2" VALLEY GUTTER PER DETAIL 3 ON C6.01.
 - 7. CONSTRUCT SIDEWALK UNDER DRAIN PER DETAIL 3 ON C6.01.
 - 8. SAWCUT AND MATCH EXISTING.
 - 9. HANDRAIL PER ARCHITECTURAL PLANS.
 - 10. CONSTRUCT GRADED LANDSCAPE SWALE, SLOPE PER PLAN.
 - 11. TRASH ENCLOSURE PER ARCHITECTURAL PLANS.
 - 12. UNDERGROUND FUEL TANK BY OTHERS.
 - 13. INSTALL RIP-RAP BMP AREA, SIZE PER PLAN. D₅₀=3", T₈=6". SEE DETAIL 4 ON C6.01.
 - 14. 2" CURB OPENING PER DETAIL 6, SHEET C6.01.
 - 15. FUELING STATION BY OTHERS.
 - 16. CONCRETE PAVEMENT OVER UNDERGROUND FUEL TANKS PER DETAIL 9 ON C6.01.
 - 17. INSTALL WHEEL STOP PER DETAIL 10 ON C6.01.
 - 18. CONSTRUCT 18" HIGH LANDSCAPE BERM.
 - 19. CONNECT TO EXISTING CURB & GUTTER.
 - 20. CONSTRUCT "O" "A" CURB PER DETAIL 1 ON C6.01.
 - 21. CONSTRUCT TURNED-DOWN SIDEWALK PER DETAIL 8 ON C6.01. NOT USED.
 - 22. INSTALL BANY CONCRETE SURFACE. SEE ARCHITECTURAL PLANS FOR MORE INFORMATION.
- GRADING NOTES:**
- 1. SLOPES 4:1 OR STEEPER AND FINE-GRAINED MATERIALS THAT HAVE BEEN DISTURBED (SANDY AND SILTY MATERIALS) SHOULD BE PROTECTED WITH BURLAP OR OTHER EROSION CONTROL FABRIC/MATERIAL, UNLESS OTHERWISE SPECIFIED BY LANDSCAPE DRAWINGS AND SPECIFICATIONS OR THE SOILS REPORT.
 - 2. CONTRACTOR SHALL DETERMINE HIS OWN FOOTING OR BASEMENT EXCAVATION QUANTITIES, EVEN THOUGH SHOWN ON ROUGH GRADING PLANS. ADDITIONALLY, STRUCTURE BACKFILL COSTS SHOULD BE INCLUDED IN THE COST OF THE STRUCTURE, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.
 - 3. CONTRACTOR SHALL NOTIFY LOCHSA ENGINEERING WITHIN 24 HOURS OF OMISSIONS AND ERRORS DISCOVERED ON PLANS. LOCHSA ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY "CORRECTIVE" WORK DONE BY OTHERS.
 - 4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE. NO PONDING ALLOWED. CONTRACTOR TO FOLLOW RECOMMENDATIONS AS OUTLINED IN THE PROJECT GEOTECHNICAL REPORT, INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING AND COMPACTION. REFER TO THE REPORT PREPARED BY NINYO & MOORE, PROJECT NO. 304289001.

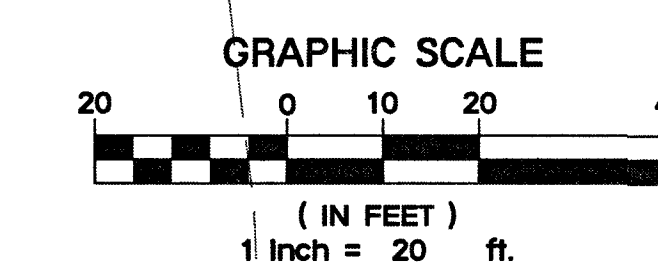
- EXISTING UTILITY NOTE:**
- CONTRACTOR TO ADJUST ALL EXISTING UTILITIES TO MATCH PROPOSED FINISH GRADE ELEVATIONS.
- FLOOD ZONE NOTE:**
- THE PROJECT SITE IS COVERED BY THE FLOOD INSURANCE RATE MAP (FIRM) FOR THE CLARK COUNTY AND INCORPORATED AREAS, NEVADA, COMMUNITY PANEL NUMBER: 320032155F, EFFECTIVE DATE: NOVEMBER 16, 2011, REISED TO REFLECT LOWR DATED JUNE 21, 2017. THE PROJECT SITE IS WITHIN ZONE "X" (UNSHADED), DESCRIBED BY FEMA AS: "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN."
- LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES GUIDANCE MANUAL SECTION 3.5.1 STANDARD NOTES 1-5**
- 1. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHT-OF-WAY OF THE CITY OF LAS VEGAS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIAL SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
 - 2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE CITY OF LAS VEGAS AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
 - 3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR0000, SECTION III.A.5.
 - 4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OR 0.5 INCHES OR MORE OF MOISTURE. THE CONTRACTOR SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR0000, SECTION III.A.12.
 - 5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

GRADING PLAN CERTIFICATION

NAME: T. EGERTON PE #11286 DATE: 4-12-19

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

107V7847



CRAIG AND RANCHO LAND HOLDINGS LLC
A.P.N. 138-02-713-005
OR: 20170512:00002201
1.53 ACRES
NOT A PART

EX. BUILDING

MAX 2% H.S.
MIN. 5% L.S. BUILDING FF

TYPICAL GRADING AWAY FROM BUILDING

CUT 32 CY
FILL 1,816 CY

NOTE: CUT/FILL QUANTITIES ARE TO FINISHED GRADE & DO NOT INCLUDE MATERIAL THICKNESS, FOOTINGS, ETC.

UTILITY NOTE:

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Call before you Dig
Avoid cutting underground utility lines. It's costly.

FAST!
Call before you Dig
Underground

1-800-227-2800
1-702-432-5300
1-702-227-2929

LEGEND	CL OR SURVEY LINE	PROPERTY LINE	ROW LINE	EASEMENT LINE	SAWCUT LINE	SCARP LINE	DESCRIPTION:	BUILDING OUTLINE	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	CONTOUR LINES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	100w HPS STREETLIGHTS	150w HPS STREETLIGHTS	200w HPS STREETLIGHTS	250w HPS STREETLIGHTS	400w HPS STREETLIGHTS
							EXISTING:																						
							PROPOSED:																						

Lochsa Engineering

6345 South Jones Blvd
Las Vegas, NV 89118
Phone (702) 365-9312
Fax (702) 365-9317
www.lochsa.com

IMPROVEMENT PLANS

GRADING PLAN

7-11 @ CRAIG & RANCHO

SITE IMPROVEMENTS

LAS VEGAS, NEVADA

SHEET: 181119

DATE: 10/01/18

SCALE: 1" = 20'

DRAWN BY: BJB

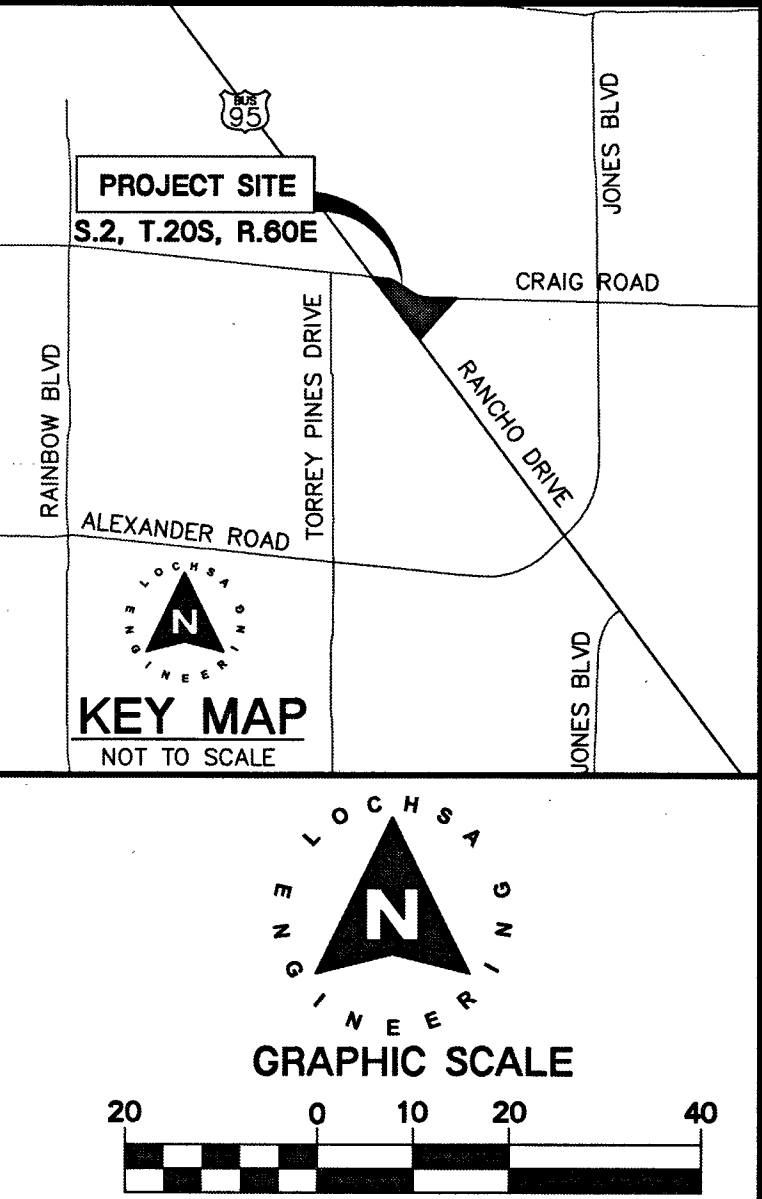
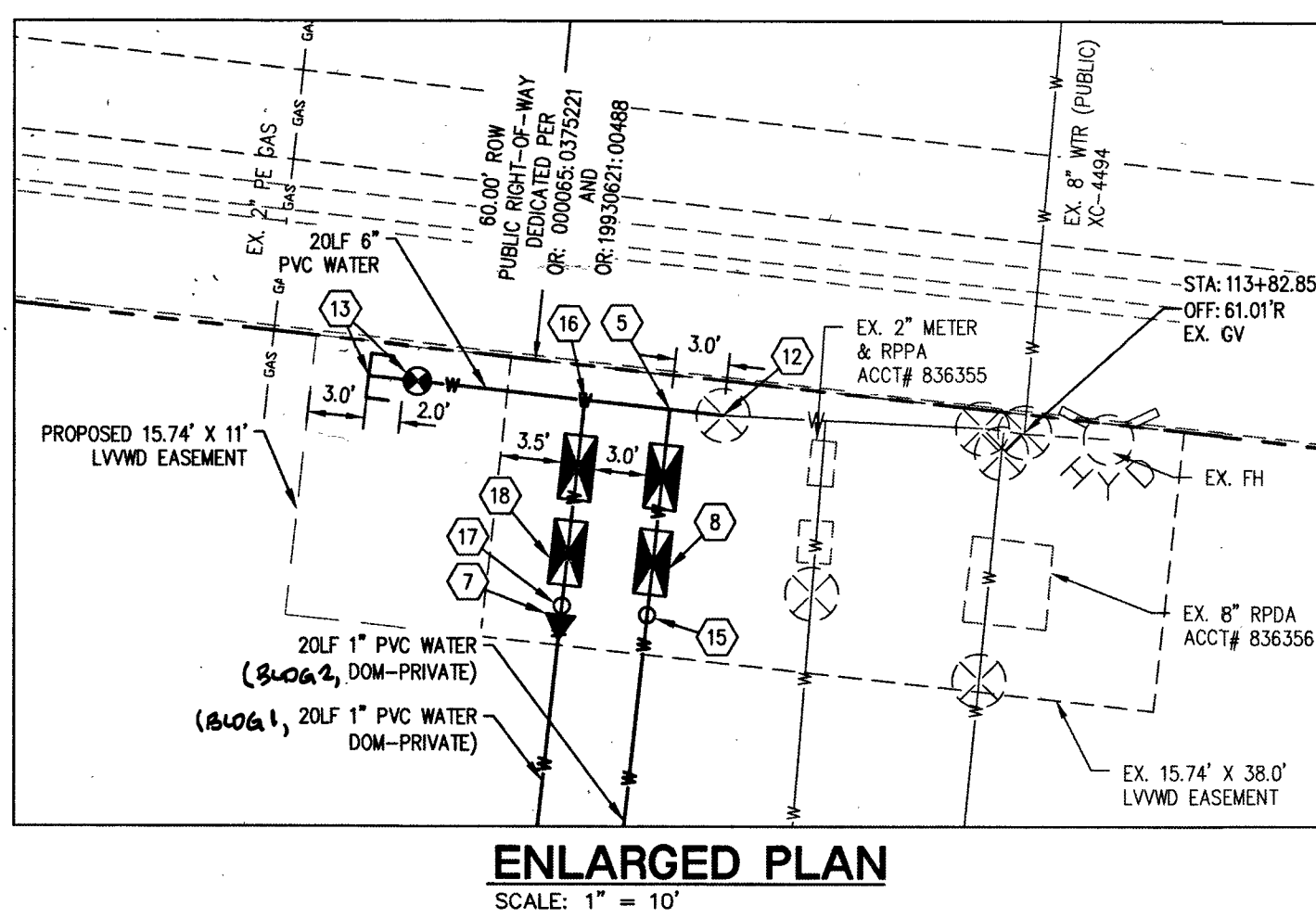
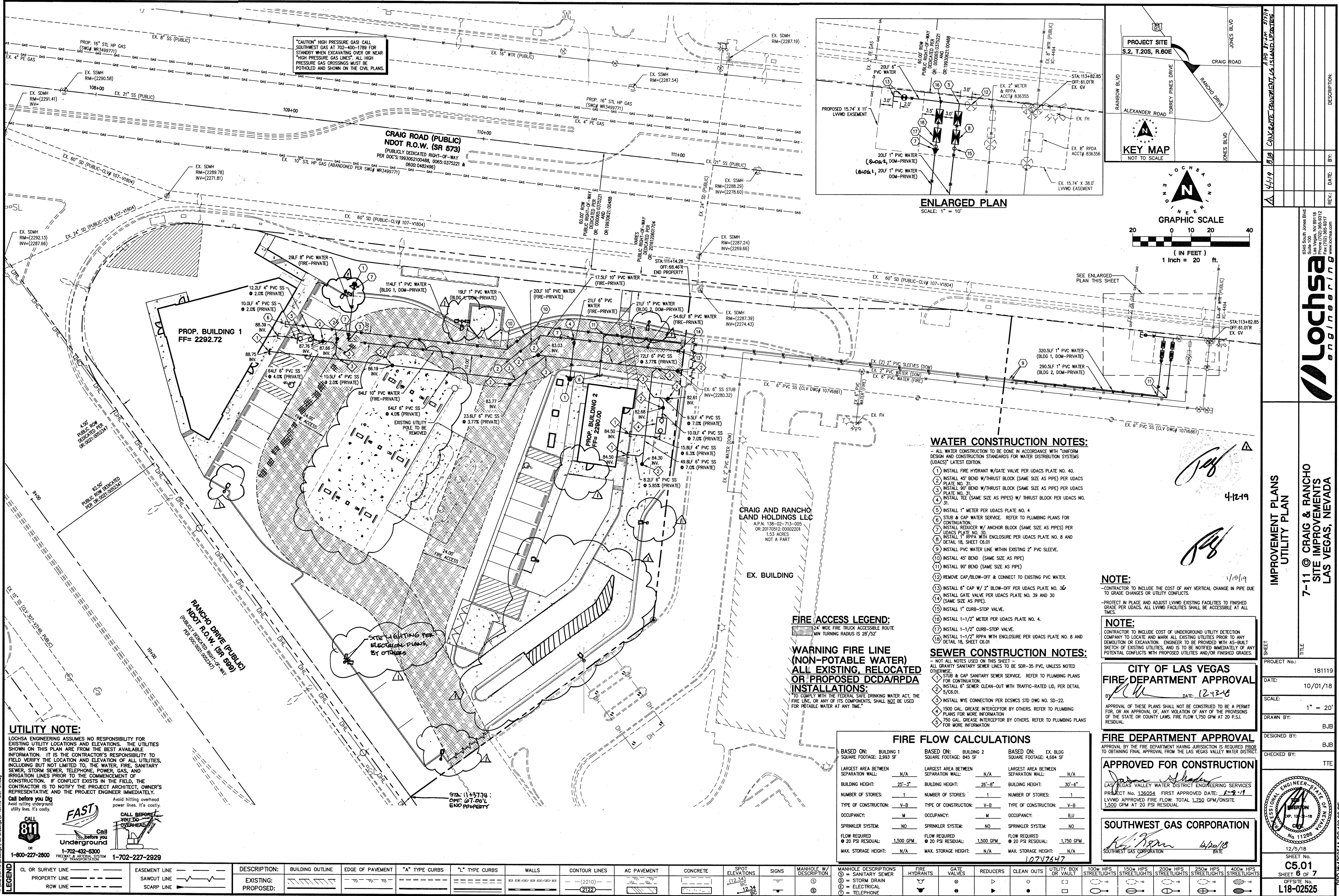
DESIGNED BY: BJB

CHECKED BY: TTE

12/5/18

SHEET No. 4.01

OFFSITE No. L18-02525



WATER CONSTRUCTION NOTES:

- 1. ALL WATER CONSTRUCTION TO BE DONE IN ACCORDANCE WITH "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS)" LATEST EDITION.
- 2. INSTALL 1" FIRE HYDRANT W/GATE VALVE PER UDACS PLATE NO. 40.
- 3. INSTALL 45° BEND W/THRUST BLOCK (SAME SIZE AS PIPE) PER UDACS PLATE NO. 31.
- 4. INSTALL 90° BEND W/THRUST BLOCK (SAME SIZE AS PIPE) PER UDACS PLATE NO. 31.
- 5. INSTALL TEE (SAME SIZE AS PIPES) W/ THRUST BLOCK PER UDACS NO. 31.
- 6. INSTALL 1" METER PER UDACS PLATE NO. 4.
- 7. STUB & CAP WATER SERVICE. REFER TO PLUMBING PLANS FOR CONTINUATION.
- 8. INSTALL REDUCER W/ ANCHOR BLOCK (SAME SIZE AS PIPES) PER UDACS PLATE NO. 31.
- 9. INSTALL 1" RPPA WITH ENCLOSURE PER UDACS PLATE NO. 8 AND DETAIL 18, SHEET 08.01.
- 10. INSTALL PVC WATER LINE WITHIN EXISTING 2" PVC SLEEVE.
- 11. INSTALL 45° BEND (SAME SIZE AS PIPE).
- 12. INSTALL 90° BEND (SAME SIZE AS PIPE).
- 13. REMOVE CAP/BLOW-OFF & CONNECT TO EXISTING PVC WATER.
- 14. INSTALL 6" CAP W/ 2" BLOW-OFF PER UDACS PLATE NO. 36.
- 15. INSTALL GATE VALVE PER UDACS PLATE NO. 39 AND 30 (SAME SIZE AS PIPE).
- 16. INSTALL 1" CURB-STOP VALVE.
- 17. INSTALL 1-1/2" METER PER UDACS PLATE NO. 4.
- 18. INSTALL 1-1/2" RPPA WITH ENCLOSURE PER UDACS PLATE NO. 8 AND DETAIL 18, SHEET 08.01.

SEWER CONSTRUCTION NOTES:

- 1. NOT ALL NOTES USED ON THIS SHEET.
- 2. ALL GRAVITY SANITARY SEWER LINES TO BE SDR-35 PVC, UNLESS NOTED OTHERWISE.
- 3. STUB & CAP SANITARY SEWER SERVICE. REFER TO PLUMBING PLANS FOR CONTINUATION.
- 4. INSTALL 6" SEWER CLEAN-OUT WITH TRAFFIC-RATED LID, PER DETAIL 5/08.01.
- 5. INSTALL WYE CONNECTION PER DCSWCS STD DWG NO. 50-22.
- 6. 1500 GAL. GREASE INTERCEPTOR BY OTHERS. REFER TO PLUMBING PLANS FOR MORE INFORMATION.
- 7. 750 GAL. GREASE INTERCEPTOR BY OTHERS. REFER TO PLUMBING PLANS FOR MORE INFORMATION.

FIRE FLOW CALCULATIONS

BASED ON: BUILDING 1		BASED ON: BUILDING 2		BASED ON: EX. BLDG	
SQUARE FOOTAGE: 2,993 SF		SQUARE FOOTAGE: 845 SF		SQUARE FOOTAGE: 4,684 SF	
LARGEST AREA BETWEEN SEPARATION WALL:	N/A	LARGEST AREA BETWEEN SEPARATION WALL:	N/A	LARGEST AREA BETWEEN SEPARATION WALL:	N/A
BUILDING HEIGHT:	25'-3"	BUILDING HEIGHT:	26'-8"	BUILDING HEIGHT:	30'-6"
NUMBER OF STORIES:	1	NUMBER OF STORIES:	1	NUMBER OF STORIES:	1
TYPE OF CONSTRUCTION:	V-B	TYPE OF CONSTRUCTION:	V-B	TYPE OF CONSTRUCTION:	V-B
OCCUPANCY:	M	OCCUPANCY:	M	OCCUPANCY:	B.U.
SPRINKLER SYSTEM:	NO	SPRINKLER SYSTEM:	NO	SPRINKLER SYSTEM:	NO
FLOW REQUIRED	20 PSI RESIDUAL: 1,500 GPM	FLOW REQUIRED	20 PSI RESIDUAL: 1,500 GPM	FLOW REQUIRED	20 PSI RESIDUAL: 1,750 GPM
MAX. STORAGE HEIGHT:	N/A	MAX. STORAGE HEIGHT:	N/A	MAX. STORAGE HEIGHT:	N/A

FIRE DEPARTMENT APPROVAL

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. 136054A FIRST APPROVED DATE: 1-9-19

LVWMD APPROVED FIRE FLOW: TOTAL 1,750 GPM/ONSITE 1,500 GPM AT 20 PSI RESIDUAL

SOUTHWEST GAS CORPORATION

DATE: 12/20/18

UTILITY NOTE:

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CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	BUILDING OUTLINE	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	CONTOUR LINES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	100W HPS STREETLIGHTS	150W HPS STREETLIGHTS	200W HPS STREETLIGHTS	250W HPS STREETLIGHTS	400W HPS STREETLIGHTS
PROPERTY LINE	SAWCUT LINE	EXISTING:						(2210)			(12.34)		① = SANITARY SEWER ② = STORM DRAIN ③ = ELECTRICAL ④ = TELEPHONE	① = SANITARY SEWER ② = STORM DRAIN ③ = ELECTRICAL ④ = TELEPHONE										
ROW LINE	SCARP LINE	PROPOSED:						(2122)																

PROJECT NO.: 181119

DATE: 10/01/18

SCALE: 1" = 20'

DRAWN BY: BJB

DESIGNED BY: BJB

CHECKED BY: TTE

7-11 @ CRAIG & RANCHO

SITE IMPROVEMENTS

LAS VEGAS, NEVADA

Lochsa Engineering

6345 South Jones Blvd

Las Vegas, NV 89118

Phone (702) 365-8312

Fax (702) 365-8317

www.lochsa.com

PROJECT: 136054A QS-138-02-SE

SHEET No. 12/5/18

C5.01

SHEET 5 OF 7

OFFSITE No. L18-02525

