

Case No. \_\_\_\_\_

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*In the*  
**Supreme Court**  
*of the*  
**State of Nevada**

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Electronically Filed  
Jul 15 2020 10:52 a.m.  
Elizabeth A. Brown  
Clerk of Supreme Court

DEKKER/PERICH/SABATINI LTD.,  
NEVADA BY DESIGN, LLC d/b/a NEVADA BY DESIGN,  
MELROY ENGINEERING, INC. d/b/a MSA ENGINEERING CONSULTANTS,  
JW ZUNINO & ASSOCIATES, LLC, and  
NINYO & MOORE, GEOTECHNICAL CONSULTANTS,

*Petitioners,*

vs.

THE EIGHTH JUDICIAL DISTRICT COURT,  
STATE OF NEVADA,  
CLARK COUNTY, and  
THE HONORABLE TREVOR ATKIN,

*Respondents,*

CITY OF NORTH LAS VEGAS,

*Real Party in Interest.*

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FROM DECISIONS OF THE EIGHTH JUDICIAL DISTRICT COURT,  
CLARK COUNTY, NEVADA  
CASE NO. A-19-798346-C  
HONORABLE TREVOR ATKIN · DEPARTMENT 8 · PHONE: (702) 671-4338

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**PETITIONERS' APPENDIX TO**  
**PETITION FOR WRIT OF MANDAMUS OR,**  
**ALTERNATIVELY, PROHIBITION**

**VOLUME 7**

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## **CHRONOLOGICAL INDEX - APPENDIX OF EXHIBITS**

<b>Exhibit:</b>	<b>Volume:</b>	<b>Bates: PET.APP.</b>	<b>Date:</b>	<b>Description:</b>
<b>8</b>	<b>7</b>	<b>000847 – 000849</b>	<b>08/20/2019 1:24 PM</b>	<b>City of North Las Vegas’ Appendix of Exhibits to Opposition to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultant’s Motion to Dismiss or in the Alternative, Motion for Summary Judgment</b>
	7	000850 – 000867	07/11/2019	<u>Exhibit 1</u> – City of North Las Vegas’ Complaint
	7	000868 – 000901	02/07/2007	<u>Exhibit 1</u> – Professional Architectural Services Agreement
	7	000902 – 000967	08/29/2007	<u>Exhibit 2</u> – Ninyo & Moore’s Geotechnical Evaluation
	7	000968 – 000981	01/30/2008	<u>Exhibit 3</u> – City of North Las Vegas’ Letter to Richardson Construction Inc re Construction Contract
	7	000982 – 000983	07/13/2009	<u>Exhibit 4</u> – Notice of Completion

## ALPHABETICAL INDEX - APPENDIX OF EXHIBITS

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<b>10</b>	<b>11</b>	<b>001560 – 001562</b>	<b>08/20/2019 1:34 PM</b>	<b>City of North Las Vegas’ Appendix of Exhibits to Opposition to Dekker/Perich/Sabatini, Ltd.’s Motion to Dismiss</b>
	11	001563 – 001580	07/11/2019	<u>Exhibit 1</u> – City of North Las Vegas’ Complaint
	11	001581 – 001614	02/07/2007	<u>Exhibit 1</u> – Professional Architectural Services Agreement
	11	001615 – 001680	08/29/2007	<u>Exhibit 2</u> – Ninyo & Moore’s Geotechnical Evaluation
	11	001681 – 001694	01/30/2008	<u>Exhibit 3</u> – City of North Las Vegas’ Letter to Richardson Construction Inc re Construction Contract
	11	001695 – 001696	07/13/2009	<u>Exhibit 4</u> – Notice of Completion
	12	001697 – 001832	12/11/2017	<u>Exhibit 5</u> – American Geotechnical Inc’s Geotechnical Investigation
	12	001833 – 001836	1988 - Present	<u>Exhibit 6</u> – American Geotechnical Inc. Resume of Edred T. Marsh, Principal Geotechnical Engineer
	12	001837 – 001838	07/03/2019	<u>Exhibit 7</u> – Declaration of Edred T. Marsh, P.E.
	12	001839 – 001840	10/17/2007	<u>Exhibit 8</u> – Ninyo & Moore Letter to Dekker/Perich/Sabatini re Review of 95 Percent Bid Set Construction Documents
	13	001841 – 002053	11/02/2007	<u>Exhibit 9</u> - Dekker/Perich/Sabatini’s Structural Calculations
	14	002054 – 002131	11/02/2007	<u>Exhibit 9</u> - Dekker/Perich/Sabatini’s Structural Calculations
	14	002132 – 002210	11/10/2007	<u>Exhibit 10</u> - Plans / Record Drawings
<b>8</b>	<b>7</b>	<b>000847 – 000849</b>	<b>08/20/2019 1:24 PM</b>	<b>City of North Las Vegas’ Appendix of Exhibits to Opposition to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultant's Motion to Dismiss or in the Alternative, Motion for Summary Judgment</b>
	7	000850 – 000867	07/11/2019	<u>Exhibit 1</u> – City of North Las Vegas’ Complaint



	7	000868 – 000901	02/07/2007	<u>Exhibit 1</u> – Professional Architectural Services Agreement
	7	000902 – 000967	08/29/2007	<u>Exhibit 2</u> – Ninyo & Moore’s Geotechnical Evaluation
	7	000968 – 000981	01/30/2008	<u>Exhibit 3</u> – City of North Las Vegas’ Letter to Richardson Construction Inc re Construction Contract
	7	000982 – 000983	07/13/2009	<u>Exhibit 4</u> – Notice of Completion
	8	000984 – 001119	12/11/2017	<u>Exhibit 5</u> – American Geotechnical Inc’s Geotechnical Investigation
	8	001120 – 001123	1988 - Present	<u>Exhibit 6</u> – American Geotechnical Inc’s Resume of Edred T. Marsh, Principal Geotechnical Engineer
	8	001124 – 001125	07/03/2019	<u>Exhibit 7</u> – Declaration of Edred T. Marsh, P.E.
	8	001126 – 001127	10/17/2007	<u>Exhibit 8</u> – Ninyo & Moore Letter to Dekker/Perich/Sabatini re Review of 95 Percent Bid Set Construction Documents
	9	001128 – 001340	11/02/2007	<u>Exhibit 9</u> - Dekker/Perich/Sabatini’s Structural Calculations
	10	001341 – 001418	11/02/2007	<u>Exhibit 9</u> - Dekker/Perich/Sabatini’s Structural Calculations
	10	001419 – 001497	11/10/2007	<u>Exhibit 10</u> - Plans / Record Drawings
	10	001498 – 001513	2019	<u>Exhibit 2</u> – Assembly Bill 421 – 80 <sup>th</sup> Session 2019
	10	001514 – 001546	05/15/2019	<u>Exhibit 3</u> - Minutes of the Senate Committee on Judiciary, 80th Legislature
<b>1</b>	<b>1</b>	<b>000001 – 000017</b>	<b>07/11/2019 4:35 PM</b>	<b>City of North Las Vegas’ Complaint Against Defendants – Exempt from Arbitration Under N.A.R. 3(A): Seeks Damages in Excess of \$50,000</b>
	1	000018 – 000051	02/07/2007	<u>Exhibit 1</u> – Professional Architectural Services Agreement
	1	000052 – 000117	08/29/2007	<u>Exhibit 2</u> – Ninyo & Moore’s Geotechnical Evaluation
	1	000118 – 000131	01/30/2008	<u>Exhibit 3</u> – City of North Las Vegas’ Letter to Richardson Construction Inc re Construction Contract
	1	000132 – 000133	07/13/2009	<u>Exhibit 4</u> – Notice of Completion

	2	000134 – 000269	12/11/2017	<u>Exhibit 5</u> – American Geotechnical Inc’s Geotechnical Investigation
	2	000270 – 000273	1988 - Present	<u>Exhibit 6</u> – American Geotechnical Inc. Resume of Edred T. Marsh, Principal Geotechnical Engineer
	2	000274 – 000275	07/03/2019	<u>Exhibit 7</u> – Declaration of Edred T. Marsh, P.E.
	2	000276 – 000277	10/17/2007	<u>Exhibit 8</u> – Ninyo & Moore Letter to Dekker/Perich/Sabatini re Review of 95 Percent Bid Set Construction Documents
	3	000278 – 000491	11/02/2007	<u>Exhibit 9</u> - Dekker/Perich/Sabatini’s Structural Calculations
	4	000492 – 000568	11/02/2007	<u>Exhibit 9</u> - Dekker/Perich/Sabatini’s Structural Calculations
	4	000569 – 000647	11/10/2007	<u>Exhibit 10</u> - Plans / Record Drawings
<b>18</b>	<b>15</b>	<b>002307 – 002312</b>	<b>09/26/2019</b>	<b>City of North Las Vegas’ Limited Opposition to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Change Date of Hearing on Motion to Dismiss or, in the Alternative, Motion for Summary Judgment on Order Shortening Time</b>
	15	002313 – 002318	09/26/2019	<u>Exhibit 1</u> – Register of Actions Case A-19-798346-C
	15	002319 – 002320	09/20/2019	<u>Exhibit 2</u> – Weil & Drage, APC’s Letter to All Counsel re Hearing of Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ on Motion to Dismiss or, in the Alternative, Motion for Summary Judgment on September 27, 2019
<b>25</b>	<b>15</b>	<b>002407 – 002421</b>	<b>11/13/2019 11:58 AM</b>	<b>City of North Las Vegas’ Motion to Alter Judgment</b>
	15	002422 – 002430	10/17/2019	<u>Exhibit 1</u> - Notice of Entry of Order Granting Nevada by Design, LLC d/b/a Nevada By Design Engineering Consultants' Motion to Dismiss or, in the alternative, Motion for Summary Judgment and All Joinders to the Same
	15	002431 – 002448	07/11/2019	<u>Exhibit 2</u> – City of North Las Vegas’ Complaint

	15	002449 – 002455	09/30/2019	<u>Exhibit 3</u> - Order Granting Nevada by Design, LLC d/b/a Nevada By Design Engineering Consultants' Motion to Change Date
	15	002456 – 002471	2019	<u>Exhibit 4</u> - Assembly Bill 421 – 80 <sup>th</sup> Session 2019
	16	002472 – 002504	05/15/2019	<u>Exhibit 5</u> - Minutes of the Senate Committee on Judiciary – Eightieth Session
	16	002505 – 002510	09/30/2019	<u>Exhibit 6</u> - Richardson Construction, Inc. and The Guarantee Company of North America USA's Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants' Motion to Dismiss or, in the Alternative, Motion for Summary Judgment
	16	002511 – 002514	09/30/2019	<u>Exhibit 7</u> - JW Zunino & Associates LLC's Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants' Motion to Dismiss or, in the Alternative, Motion for Summary Judgment
<b>6</b>	<b>6</b>	<b>000821 – 000826</b>	<b>08/15/2019 5:02 PM</b>	<b>City of North Las Vegas' Motion to Strike and Opposition to Jackson Family Partnership LLC d/b/a Stargate Plumbing's Motion to Dismiss</b>
	6	000827 – 000828	08/06/2019	<u>Exhibit 1</u> – Affidavit/Declaration of Service to Jackson Family Partnership LLC d/b/a Stargate Plumbing
<b>62</b>	<b>20</b>	<b>003467 – 003470</b>	<b>04/02/2020 4:21 PM</b>	<b>City of North Las Vegas' Notice of Entry of Decision and Order Denying Melroy Engineering, Inc. d/b/a MSA Engineering Consultants' Motion to Dismiss</b>
	20	003471 – 003480	04/02/2020	<u>Exhibit 1</u> - Order Denying Melroy Engineering, Inc. d/b/a MSA Engineering Consultants' Motion to Dismiss
<b>66</b>	<b>21</b>	<b>003589 – 003592</b>	<b>05/05/2020 3:48 PM</b>	<b>City of North Las Vegas' Notice of Entry of Decision and Order Denying Richardson Construction, Inc. and The Guarantee Company of North America USA's Motion to Dismiss / Motion for Summary Judgment Based on Laches and All Joinders</b>
	21	003593 – 003597	05/05/2020	<u>Exhibit 1</u> – Court's Decision and Order Denying Richardson Construction, Inc. and The Guarantee Company of North America USA's Motion to Dismiss / Motion for Summary Judgment Based on Laches and All Joinders

46	18	003064 – 003067	01/24/2020 3:55 PM	City of North Las Vegas’ Notice of Entry of Decision and Order Granting Its Motion to Alter Judgment
	18	003068 – 003073	01/23/2020	<u>Exhibit 1</u> – Court’s Decision and Order
9	11	001547 – 001559	08/20/2019 1:34 PM	City of North Las Vegas’ Opposition to Dekker/Perich/Sabatini, Ltd.’s Motion to Dismiss
52	19	003255 – 003274	02/17/2020 4:39 PM	City of North Las Vegas’ Opposition to Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ and Joinders Motion to Dismiss on Order Shortening Time
60	20	003409 – 003413	03/16/2020 4:57 PM	City of North Las Vegas’ Opposition to Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ Motion for Clarification Regarding Court’s Minute Order Denying Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ Motion to Dismiss Brought Pursuant to NRS 11.258, on Order Shortening Time
	20	003414 – 003415	03/13/2020	<u>Exhibit 1</u> – Email re Proposed Order Denying MSA’s Motion to Dismiss on NRS 11.258
	20	003416 – 003425	Undated	<u>Exhibit 2</u> – Order Denying Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ Motion to Dismiss
	20	003426 – 003428	03/16/2020	<u>Exhibit 3</u> – Email re Request to Withdraw Motion for Clarification on Order Shortening Time Without Prejudice
7	6	000829 – 000846	08/20/2019 1:24 PM	City of North Las Vegas’ Opposition to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultant’s Motion to Dismiss or, in the Alternative, Motion for Summary Judgement
45	18	003047 – 003063	12/19/2019 4:59 PM	City of North Las Vegas’ Reply in Support of Its Motion to Alter Judgment

<b>20</b>	<b>15</b>	<b>002326 – 002330</b>	<b>09/27/2019 4:18 PM</b>	<b>City of North Las Vegas’ Surreply to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Change Date of Hearing on Motion to Dismiss or, in the Alternative, Motion for Summary Judgment on Order Shortening Time</b>
<b>61</b>	<b>20</b>	<b>003429 – 003466</b>	<b>03/30/2020 3:09 PM</b>	<b>Court Recorder’s Transcript of Hearing re All Pending Motions, March 10, 2020</b>
<b>63</b>	<b>20</b>	<b>003481 – 003491</b>	<b>04/10/2020 3:04 PM</b>	<b>Court Recorder’s Transcript of Hearing re All Pending Motions, March 17, 2020</b>
<b>23</b>	<b>15</b>	<b>002339 – 002398</b>	<b>10/10/2019 1:20 PM</b>	<b>Recorder’s Transcript of Hearing Re: All Pending Motions, September 30, 2019</b>
<b>65</b>	<b>21</b>	<b>003541 – 003588</b>	<b>04/21/2020 8:19 AM</b>	<b>Court Recorder’s Transcript of Proceedings re All Pending Motions, February 20, 2020</b>
<b>64</b>	<b>21</b>	<b>003492 – 003540</b>	<b>04/21/2020 8:19 AM</b>	<b>Court Recorder’s Transcript of Proceedings re City of North Las Vegas’ Motion to Alter Judgment, January 21, 2020</b>
<b>29</b>	<b>16</b>	<b>002678 – 002681</b>	<b>11/26/2019 12:35 PM</b>	<b>Dekker/Perich/Sabatini, Ltd.’s Joinder to JW Zunino &amp; Associates LLC’s Opposition to City of North Las Vegas’ Motion to Alter</b>
<b>49</b>	<b>19</b>	<b>003147 – 003154</b>	<b>02/04/2020 3:11 PM</b>	<b>Dekker/Perich/Sabatini, Ltd.’s Joinder to Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ Motion to Dismiss on Order Shortening Time</b>
<b>3</b>	<b>5</b>	<b>000718 – 000720</b>	<b>08/06/2019 2:44 PM</b>	<b>Dekker/Perich/Sabatini, Ltd.’s Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, In the Alternative, Motion for Summary Judgment</b>

28	16	002651 – 002660	11/26/2019 12:28 PM	<b>Dekker/Perich/Sabatini, Ltd.’s Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Opposition to Motion to Alter Judgment; Opposition by Incorporation and Request to Reset Prior Motion to Dismiss</b>
	16	002659 – 002664	10/15/2019	<u>Exhibit 1</u> – Order Granting Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, in the Alternative, Motion for Summary Judgment and all Joinders to Same
	16	002665 – 002677	08/06/2019	<u>Exhibit 2</u> – Dekker/Perich/Sabatini, Ltd.’s Motion to Dismiss
4	6	000721 – 000735	08/06/2019 2:44 PM	<b>Dekker/Perich/Sabatini, Ltd.’s Motion to Dismiss</b>
	6	000734 – 000751	07/11/2019	<u>Exhibit A</u> – City of North Las Vegas’ Complaint
	6	000752 – 000786	02/07/2007	<u>Exhibit B</u> – City of North Las Vegas’ Complaint <u>Exhibit 1</u> – Professional Architectural Services Agreement
	6	000787 – 000789	07/11/2019	<u>Exhibit C</u> – Affidavit of Aleema A. Dhalla, Esq.
	6	000790 – 000793	1988 – Present	<u>Exhibit D</u> – American Geotechnical, Inc.’s Resume of Edred T. Marsh, Principal Geotechnical Engineer
	6	000794 – 000801	03/23/2007	<u>Exhibit E</u> - Excerpts from Legislative History of N.R.S. 11.258
	6	000802 – 000803	07/03/2019	<u>Exhibit F</u> – Declaration of Edred T. Marsh, P.E.
	6	000804 – 000817	12/11/2017	<u>Exhibit G</u> - American Geotechnical, Inc.’s Geotechnical Investigation
13	14	002219 – 002232	08/28/2019 8:48 AM	<b>Dekker/Perich/Sabatini, Ltd.’s Reply to City of North Las Vegas’ Opposition to Its Motion to Dismiss</b>
53	19	003275 – 003285	02/18/2020 3:00 PM	<b>Dekker/Perich/Sabatini, Ltd.’s Reply to City of North Las Vegas’ Opposition to Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ and Joinders to Motion to Dismiss on Order Shortening Time</b>
	19	003286 – 003287	07/03/2019	<u>Exhibit A</u> – Declaration of Edred T. Marsh, P.E.

	19	003288 – 003294	07/11/2019	<u>Exhibit B</u> – City of North Las Vegas’ Complaint
12	14	002214 – 002218	08/26/2019 4:15 PM	Jackson Family Partnership LLC d/b/a Stargate Plumbing’s Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, In the Alternative, Motion for Summary Judgment
36	18	002894 – 002900	12/02/2019 2:22 PM	Jackson Family Partnership LLC d/b/a Stargate Plumbing’s Joinder to JW Zunino & Associates LLC’s Opposition to Motion to Alter Judgment with Supplemental Points and Authorities
7	18	002901 – 002907	12/02/2019 2:22 PM	Jackson Family Partnership LLC d/b/a Stargate Plumbing’s Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Opposition to City of North Las Vegas’ Motion to Alter Judgment with Supplemental Points and Authorities
2	18	003037 – 003039	12/03/2019 10:01 AM	JW Zunino & Associates LLC’s Joinder to Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ Opposition to Motion to Alter Judgment
50	19	003155 – 003166	02/07/2020 3:04 PM	JW Zunino & Associates LLC’s Joinder to Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ Motion to Dismiss on Order Shortening Time
22	15	002336 – 002338	09/30/2019 4:35 PM	JW Zunino & Associates LLC’s Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, in the Alternative, Motion for Summary Judgment
31	17	002686 – 002688	11/27/2019 10:43 AM	JW Zunino & Associates LLC’s Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Opposition to Motion to Alter Judgment
38	18	002908 – 002910	12/02/2019 2:34 PM	JW Zunino & Associates LLC’s Joinder to Richardson Construction, Inc. and The Guarantee Company of North America USA’s Opposition to Motion to Alter Judgment

26	16	002515 – 002527	11/25/2019 5:02 PM	<b>JW Zunino &amp; Associates LLC's Opposition to City of North Las Vegas' Motion to Alter Judgment</b>
	16	002528 – 002530	10/09/2019	<u>Exhibit A</u> – Affidavit of Rita Tuttle
57	20	003385 – 003391	02/19/2020 11:29 AM	<b>JW Zunino &amp; Associates LLC's Reply to City of North Las Vegas' Opposition to Melroy Engineering, Inc. d/b/a MSA Engineering Consultants' Motion to Dismiss on Order Shortening Time</b>
5	6	000818 – 000820	08/08/2019 1:32 PM	<b>Melroy Engineering, Inc. d/b/a MSA Engineering Consultants' Joinder to Nevada By Design, LLC d/b/a Nevada By Design Engineering Consultants' Motion to Dismiss or, In the Alternative, Motion for Summary Judgment</b>
40	18	003029 – 003032	12/02/2019 3:19 PM	<b>Melroy Engineering, Inc. d/b/a MSA Engineering Consultants' Joinder to JW Zunino &amp; Associates, LLC's Opposition to City of North Las Vegas' Motion to Alter Judgment</b>
41	18	003033 – 003036	12/02/2019 3:19 PM	<b>Melroy Engineering, Inc. d/b/a MSA Engineering Consultants' Joinder to Nevada By Design, LLC d/b/a Nevada By Design Engineering Consultants' Opposition to City of North Las Vegas' Motion to Alter Judgment</b>
39	18	002911 – 002936	12/02/2019 3:19 PM	<b>Melroy Engineering, Inc. d/b/a MSA Engineering Consultants' Opposition to Motion to Alter Judgment</b>
	18	002937 – 002941	10/15/2019	<u>Exhibit 1</u> – Order Granting Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants' Motion to Dismiss or, in the Alternative, Motion for Summary Judgment and all Joinders to Same
	18	002942 – 002960	08/20/2019	<u>Exhibit 2</u> – City of North Las Vegas' Opposition to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants' Motion to Dismiss or, in the Alternative, Motion for Summary Judgment
	18	002961 – 003021	10/10/2019	<u>Exhibit 3</u> – Court Recorder's Transcript of Hearing: All Pending Motions



	18	003022 – 003024	10/15/2019	<u>Exhibit 4</u> – Order Granting Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants' Motion to Change Date of Haring on Motion to Dismiss or, in the Alternative, Motion for Summary Judgment on Order Shortening Time
	18	003025 – 003028	08/05/2019	<u>Exhibit 5</u> – Cover Sheet Filings of: Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants' Motion to Dismiss or, in the Alternative, Motion for Summary Judgment; Dekker/Perich/Sabatini, Ltd.'s Motion to Dismiss; and Melroy Engineering, Inc. d/b/a MSA Engineering Consultants Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants' Motion to Dismiss or, in the Alternative, Motion for Summary Judgment
7	18	<b>003074 – 003090</b>	<b>02/04/2020 12:14 PM</b>	<b>Melroy Engineering, Inc. d/b/a MSA Engineering Consultants'</b> <b>Motion to Dismiss on Order Shortening Time</b>
	19	003091 – 003108	07/11/2019	<u>Exhibit A</u> – City of North Las Vegas' Complaint
	19	003110 – 003111	07/11/019	<u>Exhibit B</u> – Affidavit of Aleema A. Dhalla, Esq.
	19	003112 – 003115	1988 - Present	<u>Exhibit C</u> – American Geotechnical Inc's Resume of Edred T. Marsh, Principal Geotechnical Engineer
	19	003116 – 003123	03/23/2007	<u>Exhibit D</u> – Legislative History of 11.258 Senate Bill 243
	19	003124 – 003137	12/11/2017	<u>Exhibit E</u> – American Geotechnical Inc's Geotechnical Investigation
	19	003138 – 003139	07/03/2019	<u>Exhibit F</u> – Declaration of Edred T. Marsh, P.E.
59	20	<b>003399 – 003408</b>	<b>03/16/2020 8:58 AM</b>	<b>Melroy Engineering, Inc. d/b/a MSA Engineering Consultants'</b> <b>Motion for Clarification Regarding Court's Minute Order Denying Melroy Engineering, Inc. d/b/a MSA Engineering Consultants' Motion to Dismiss Brought Pursuant to NRS 11.258, on Order Shortening Time</b>

55	20	003308 – 003318	02/18/2020 5:02 PM	<b>Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ Reply to City of North Las Vegas’ Opposition to Its Motion to Dismiss</b>
	20	003319 – 003325	02/12/2020	<u>Exhibit 1</u> – Notice of Entry of Order Granting Kittrell Garlock and Associates, Architects, AIA, Ltd.’s Motion to Dismiss; Kittrell Garlock and Associates, Architects, AIA, Ltd.’s Motion to Dismiss City of North Las Vegas’ Complaint
	20	003326 – 003340	11/22/2019	Kittrell Garlock and Associates, Architects, AIA, Ltd.’s Motion to Dismiss City of Las Vegas’ Complaint
	20	003341 - 003347	11/06/2019	<u>Exhibit A</u> – City of North Las Vegas’ Complaint
	20	003348 – 003353	N/A	<u>Exhibit B</u> – Michael Panish Expert Witness & Consultants Construction Systems Curriculum Vitae
	20	003354 – 003361	03/23/2007	<u>Exhibit C</u> - Legislative History of 11.258 Senate Bill 243
	20	003362 – 003366	12/09/2019	A-19-804979-C Kelli Nash’ Opposition to Defendant’s Motion to Dismiss its Complaint
	20	003367 – 003373	12/26/2019	A-19-804979 Kittrell Garlock and Associates, Architects, AIA, Ltd.’s Reply to Kelly Nash’s Opposition to its Motion to Dismiss Kelly Nash’s Complaint
	20	003374 – 003378	10/15/2019	<u>Exhibit 1</u> – Stipulation and Order to Dismiss Kittrell Garlock and Associates, AIA, Ltd.
30	16	002682 – 002685	11/26/2019 12:43 PM	<b>Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Joinder to JW Zunino &amp; Associates LLC’s Opposition to City of North Las Vegas’ Motion to Alter</b>
48	19	003140 – 003146	02/04/2020 3:09 PM	<b>Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Joinder to Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ Motion to Dismiss on Order Shortening Time</b>

17	15	002282 – 002292	09/18/2019 3:07 PM	<b>Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Change Date of Hearing on Motion to Dismiss or, in the Alternative, Motion for Summary Judgment on Order Shortening Time</b>
	15	002293 – 002294	08/06/2019	<u>Exhibit A</u> – Clerk of the Court’s Notice of Hearing
	15	002295 – 002296	09/06/2019	<u>Exhibit B</u> – Court’s Notice of Rescheduling Motions to Dismiss and Joinders
	15	002297 – 002202	09/09/2019	<u>Exhibit C</u> – Emails re Rescheduling of Hearing
	15	002203 – 002304	09/10/2019	<u>Exhibit D</u> – Emails re Rescheduling of Hearing
	15	002305 – 002306	N/A	<u>Exhibit E</u> – Las Vegas Law Offices of Snell & Wilmer
2	5	000648 – 000663	08/05/2019 4:15 PM	<b>Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, in the Alternative, Motion for Summary Judgment</b>
	5	000664 – 000681	07/11/2019	<u>Exhibit A</u> – City of North Las Vegas’ Complaint
	5	000682 – 000684	07/13/2009	<u>Exhibit B</u> – City of North Las Vegas’ Complaint Exhibit 4 Notice of Completion
	5	000685 – 000690	03/25/2019	<u>Exhibit C</u> - Nevada Legislature Website (80 <sup>th</sup> Session) Concerning the “Effective Date” of the AB 421
	5	000691 – 000693	07/11/2019	<u>Exhibit D</u> – Aleem A. Dhalla, Esq.’s Affidavit of Merit Attached to City of North Las Vegas’ Complaint
	5	000694 – 000707	12/11/2017	<u>Exhibit E</u> - American Geotechnical, Inc’s Geotechnical Investigation
	5	000708 – 000709	07/03/2019	<u>Exhibit F</u> – Declaration of Edred T. Marsh, P.E.
	5	000710 – 000717	03/23/2007	<u>Exhibit G</u> – Excerpts from Legislative History of N.R.S. 11.258
24	15	002399 – 002406	10/17/2019 10:08 AM	<b>Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Notice of Entry of Order Granting Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, in the Alternative, Motion for Summary Judgment and All Joinders to Same</b>

27	16	002531 – 002558	11/26/2019 11:17 PM	<b>Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Opposition to Motion to Alter Judgment</b>
	16	002559 – 002563	10/15/2019	<u>Exhibit 1</u> – Order Granting Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, in the Alternative, Motion for Summary Judgment and all Joinders to Same
	16	002564 – 002582	08/20/2019	<u>Exhibit 2</u> – City of North Las Vegas’ Opposition to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, in the Alternative, Motion for Summary Judgment
	16	002583 – 002643	10/10/2019	<u>Exhibit 3</u> – Court Recorder’s Transcript of Hearing: All Pending Motions
	16	002644 – 002646	10/15/2019	<u>Exhibit 4</u> – Order Granting Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Change Date of Hearing on Motion to Dismiss or, in the Alternative, Motion for Summary Judgment on Order Shortening Time
	16	002647 – 002650	08/05/2019 08/06/2019 08/08/2019	<u>Exhibit 5</u> - Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, in the Alternative, Motion for Summary Judgment Dekker/Perich/Sabatini, Ltd.’s Motion to Dismiss Melroy Engineering, Inc. d/b/a MSA Engineering Consultants Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, in the Alternative, Motion for Summary Judgment
19	15	002321 – 002325	09/26/2019 5:16 PM	<b>Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Reply to City of North Las Vegas’ Limited Opposition to Motion to Change Date of Hearing</b>
54	20	003295 – 003307	02/18/2020 3:57 PM	<b>Nevada by Design, LLC d/b/a Nevada By Design Engineering Consultants’ Reply to City of North Las Vegas’ Opposition to Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ and Joinders to Motion to Dismiss on Order Shortening Time</b>

14	14	002233 – 002249	8/28/2019 9:02 AM	Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ <b>Rely to City of North Las Vegas’ Opposition to Motion to Dismiss or, in the Alternative, Motion for Summary Judgement</b>
	14	002250 – 002255	07/01/019	<u>Exhibit A</u> – Assembly Bill No. 221 – Committee on Judiciary 80 <sup>th</sup> Session (2019)
	14	002256 – 002257	2019	<u>Exhibit B</u> – 80 <sup>th</sup> Session (2019)
	15	002258 – 002271	12/11/2017	<u>Exhibit C</u> – American Geotechnical Inc’s Geotechnical Investigation
35	17	002891 – 002893	12/02/2019 1:54PM	Ninyo & Moore, Geotechnical Consultants’ <b>Joinder to JW Zunino &amp; Associates LLC’s Opposition to City of North Las Vegas’ Motion to Alter Judgment</b>
44	18	003044 – 003046	12/06/2019 10:08 AM	Ninyo & Moore, Geotechnical Consultants’ <b>Joinder to Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ Opposition to Motion to Alter Judgment With Respect to Statute of Repose Arguments</b>
51	19	003167 – 003174	02/07/2020 3:36 PM	Ninyo & Moore, Geotechnical Consultants’ <b>Joinder to Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ Motion to Dismiss on Order Shortening Time</b>
	19	003175 – 003240	08/29/2007	<u>Exhibit A</u> – Ninyo & Moore’s Geotechnical Evaluation
	19	003241 – 003254	12/11/2017	<u>Exhibit B</u> – American Geotechnical Inc’s Geotechnical Investigation
11	14	002211 – 002213	08/23/2019 10:02 AM	Ninyo & Moore, Geotechnical Consultants’ <b>Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, In the Alternative, Motion for Summary Judgment</b>
15	15	002272 – 002274	09/06/2019 12:14 PM	Ninyo & Moore, Geotechnical Consultants’ <b>Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, In the Alternative, Motion for Summary Judgment</b>

<b>34</b>	<b>17</b>	<b>002888 – 002890</b>	<b>12/02/2019 1:54 PM</b>	<b>Ninyo &amp; Moore, Geotechnical Consultants’ Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Opposition to City of North Las Vegas’ Motion to Alter Judgment</b>
<b>58</b>	<b>20</b>	<b>003392 – 003398</b>	<b>02/19/2020 2:56 PM</b>	<b>Ninyo &amp; Moore, Geotechnical Consultants’ Reply to City of North Las Vegas Opposition to Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ and Joinders to Motion to Dismiss on Order Shortening Time</b>
<b>32</b>	<b>17</b>	<b>002689 – 002693</b>	<b>11/27/2019 1:15 PM</b>	<b>Paffenbarger &amp; Walden, LLC and P &amp; W Bonds, LLC’s Joinder in (1) Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Opposition to Motion to Alter Judgment; and (2) JW Zunino &amp; Associates LLC Opposition to Motion to Alter Judgment</b>
<b>43</b>	<b>18</b>	<b>003040 – 003043</b>	<b>12/04/2019 8:35 AM</b>	<b>Paffenbarger &amp; Walden, LLC and P &amp; W Bonds, LLC’s Joinder in (1) Richardson Construction, Inc. and The Guarantee Company of North America USA’s Opposition to Motion to Alter Judgment; and (2) Melroy Engineering, Inc. d/b/a MSA Engineering Consultants’ Opposition to Motion to Alter Judgment</b>
<b>16</b>	<b>15</b>	<b>002275 – 002281</b>	<b>09/13/2019 4:22 PM</b>	<b>Paffenbarger &amp; Walden, LLC and P &amp; W Bonds, LLC’s Limited Joinder in Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, in the Alternative, Motion for Summary Judgment</b>
<b>21</b>	<b>15</b>	<b>002331 – 002335</b>	<b>09/30/2019 11:29 AM</b>	<b>Richardson Construction, Inc. and The Guarantee Company of North America USA’s Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Dismiss or, in the Alternative, Motion for Summary Judgment</b>

56	20	003379 – 003384	02/18/2020 5:06 PM	<b>Richardson Construction, Inc. and The Guarantee Company of North America USA's Limited Response to Melroy Engineering, Inc. d/b/a MSA Engineering Consultants' Motion to Dismiss on Order Shortening Times and All Joinder Thereto</b>
33	17	002694 – 002887	11/27/2019 4:51 PM	<b>Richardson Construction, Inc. and The Guarantee Company of North America USA's Opposition to Motion to Alter Judgment and Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants' Opposition to Motion to Alter Judgment</b>
	17	002706 – 002723	07/11/2019	<u>Exhibit A</u> – City of North Las Vegas' Complaint
	17	002724 – 002740	08/05/2019	<u>Exhibit B</u> - Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants' Motion to Dismiss or, in the Alternative, Motion for Summary Judgment
	17	002741 – 002758	07/11/2019	<u>Exhibit A</u> – City of North Las Vegas' Complaint
	17	002759 – 002761	07/13/2009	<u>Exhibit B</u> – City of North Las Vegas' Complaint Exhibit 4 Notice of Completion
	17	002762 – 002767	03/25/2019	<u>Exhibit C</u> – AB421
	17	002768 – 002770	07/11/2019	<u>Exhibit D</u> – Affidavit of Aleema A. Dhalla, Esq.
	17	002771 – 002784	12/11/2017	<u>Exhibit E</u> – American Geotechnical Inc's Geotechnical Investigation
	17	002785 – 002786	07/03/2019	<u>Exhibit F</u> – Declaration of Edred T. Marsh, P.E.
	17	002787 – 002794	03/23/2007	<u>Exhibit G</u> – Senate Bill 243 - 11.258
	17	002795 – 002796	08/06/2019	<u>Exhibit C</u> – Clerk of the Court's Notice of Hearing
	17	002797 – 002815	08/20/2019	<u>Exhibit D</u> – City of North Las Vegas' Opposition to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants' Motion to Dismiss or, in the Alternative, Motion for Summary Judgment
	17	002816 – 002822	09/04/2019	<u>Exhibit E</u> – Richardson Construction, Inc.'s and The Guarantee Company of North America USA's Motion to Dismiss

17	002823 – 002824	09/06/2019	<u>Exhibit F</u> – Clerk of the Court’s Notice of Hearing
17	002825 – 002831	11/27/2019	<u>Exhibit G</u> – Register of Actions
17	002832 – 002833	09/10/2019	<u>Exhibit H</u> – Emails re Rescheduling of Hearing
17	002834 – 002846	09/18/2019	<u>Exhibit I</u> - Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants’ Motion to Change Date of Hearing of Motion to Dismiss or, in the Alternative, Motion for Summary Judgment
17	002847 – 002848	08/06/2019	<u>Exhibit A</u> – Clerk of the Court’s Notice of Hearing
17	002849 – 002850	09/06/2019	<u>Exhibit B</u> – Court’s Notice of Rescheduling Motions to Dismiss and Joinders
17	002851 – 002856	09/09/019	<u>Exhibit C</u> – Emails re Rescheduling of Hearing
17	002857 – 002858	09/10/2019	<u>Exhibit D</u> – Emails re Rescheduling of Hearing
17	002859 – 002860	N/A	<u>Exhibit E</u> – Las Vegas Law Offices of Snell & Wilmer
17	002861 – 002862	09/20/2019	<u>Exhibit J</u> – Weil & Drage, APC Letter to All Counsel re Hearing of Nevada By Design, LLC d/b/a Nevada by Design Engineering Consultants' Motion to Dismiss or, in the Alternative, Motion for Summary Judgment on September 27, 2019
17	002863 – 002868	09/26/2019	<u>Exhibit K</u> - Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants' Reply to City of North Las Vegas’ Limited Opposition to Motion to Change Date of Hearing
17	002869 – 002871	11/27/2019	<u>Exhibit L</u> – Register of Actions A-19-798346-C
17	002872 – 002874	11/27/2019	<u>Exhibit M</u> – Register of Actions A-19-798346-C
17	002875 – 002880	09/30/3019	<u>Exhibit N</u> – Richardson Construction, Inc. and The Guarantee Company of North America USA’s Joinder to Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants' Motion to Dismiss or, in the Alternative, Motion for Summary Judgment



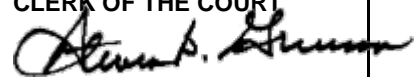
	17	002281 – 002887	10/17/2019	<u>Exhibit O</u> – Notice of Entry of Order Granting Nevada by Design, LLC d/b/a Nevada by Design Engineering Consultants' Motion to Change Date of Haring on Motion to Dismiss or, in the Alternative, Motion for Summary Judgment on Order Shortening Time
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# **EXHIBIT 8**

## **PETITIONERS' APPENDIX**

# **EXHIBIT 8**

## **PETITIONERS' APPENDIX**



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*Attorneys for the City of North Las Vegas*

**DISTRICT COURT**

**CLARK COUNTY, NEVADA**

City of North Las Vegas,

Plaintiff,

vs.

Dekker/Perich/Sabatini Ltd.; Richardson  
Construction, Inc.; Nevada By Design, LLC  
d/b/a Nevada By Design Engineering  
Consultants; JW Zunino & Associates, LLC;  
Melroy Engineering, Inc. d/b/a MSA  
Engineering Consultants; O'Connor  
Construction Management Inc.; Ninyo &  
Moore, Geotechnical Consultants; Jackson  
Family Partnership LLC d/b/a Stargate  
Plumbing; Avery Atlantic, LLC; Big C LLC;  
Ron Hanlon Masonry, LLC; The Guarantee  
Company of North America USA; P & W  
Bonds, LLC; Paffenbarger & Walden, LLC;  
DOES I through X, inclusive; and ROE  
CORPORATIONS I through X, inclusive,

Defendants.

CASE NO.: A-19-798346-C

DEPT. NO.: VIII

**APPENDIX OF EXHIBITS TO  
PLAINTIFF'S OPPOSITION TO  
DEFENDANT NEVADA BY DESIGN,  
LLC D/B/A NEVADA BY DESIGN  
ENGINEERING CONSULTANT'S  
MOTION TO DISMISS OR IN THE  
ALTERNATIVE, MOTION FOR  
SUMMARY JUDGMENT**

The City of North Las Vegas ("City") submits this Appendix of Exhibits to its Opposition to Defendant Nevada By Design, LLC d/b/a Nevada By Design Engineering Consultant's Motion to Dismiss or in the alternative, Motion for Summary Judgment.

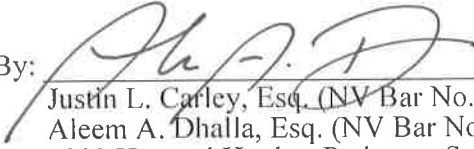
**EXHIBITS**

Ex.	Description	Pages
1	Complaint (July 11, 2019)	001-647
	<u>Exhibit 1</u> : Professional Architectural Services Agreement ("Design Agreement") (February 7, 2007)	19-51
	<u>Exhibit 2</u> : Ninyo & Moore's Geotechnical Evaluation Proposed Fire Station 53	53-117
	<u>Exhibit 3</u> : Construction Contract between the City and Richardson Construction (January 16, 2008)	119-131
	<u>Exhibit 4</u> : Recorded Notice of Completion (July 13, 2009)	133
	<u>Exhibit 5</u> : American Geotechnical's Report (December 11, 2017)	135-269
	<u>Exhibit 6</u> : Resume of expert Edred T. Marsh, P.E. of American Geotechnical Inc.	271-273
	<u>Exhibit 7</u> : Declaration of expert Edred T. Marsh, P.E. (July 3, 2019)	275
	<u>Exhibit 8</u> : Ninyo & Moore's Letter from Naik Banavathu, P.E. and Eric D. Elison, P.E. to Chris Larsen re Review of 95 Percent Bid Set Construction Documents Proposed Fire Station 53 (October 17, 2007)	277
	<u>Exhibit 9</u> : Dekker/Perich/Sabatini's Structural Calculations (November 2, 2007)	279-568
	<u>Exhibit 10</u> : Department of Public Works CNLV Fire Station 53 – Bid No. 1287	570-647
2	Assembly Bill 421 - 80th Session (2019)	648-662
3	Minutes of the Senate Committee on Judiciary, 80th Legislature (May 15, 2019)	663-694

Dated: August 20, 2019.

SNELL &amp; WILMER L.L.P.

By:

  
 Justin L. Carley, Esq. (NV Bar No. 9994)  
 Aleem A. Dhalla, Esq. (NV Bar No. 14188)  
 3883 Howard Hughes Parkway, Suite 1100  
 Las Vegas, Nevada 89169

Attorneys for the City of North Las Vegas

**CERTIFICATE OF SERVICE**

I, the undersigned, declare under penalty of perjury, that I am over the age of eighteen (18) years, and I am not a party to, nor interested in, this action. On this date, I caused to be served a true and correct copy of the foregoing **APPENDIX OF EXHIBITS TO PLAINTIFF'S OPPOSITION TO DEFENDANT NEVADA BY DESIGN, LLC D/B/A NEVADA BY DESIGN ENGINEERING CONSULTANT'S MOTION TO DISMISS OR IN THE ALTERNATIVE, MOTION FOR SUMMARY JUDGMENT** to the following:

**VIA E-MAIL**

Jerome Jackson, Member  
Jackson Family Partnership LLC d/b/a  
Stargate Plumbing  
1951 Stella Lake St., Suite 1  
Las Vegas, Nevada 89106  
Telephone: (702) 648-7525  
Email: [stargatepl@aol.com](mailto:stargatepl@aol.com)  
*Pro Se*

Theodore Parker III, Esq.  
**Parker Nelson & Associates, Chtd.**  
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*Attorney for Defendant Richardson  
Construction, Inc.*

Jorge A. Ramirez, Esq.  
**Wilson, Elser, Moskowitz, Edelman &  
Dicker LLP**  
300 South 4<sup>th</sup> Street, 11<sup>th</sup> Floor  
Las Vegas, Nevada 89101  
[Jorge.ramirez@wilsonelser.com](mailto:Jorge.ramirez@wilsonelser.com)  
*Attorney for Defendant Ninyo & Moore,  
Geotechnical Consultants*

**VIA E-SERVICE ONLY**

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Anthony D. Platt, Esq.  
**Weil & Drage, APC**  
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Henderson, NV 89052  
*Attorneys for Defendant Nevada By Design, LLC  
d/b/a Nevada by Design Engineering Consultants  
and Dekker/Perich/Sabatini, Ltd.*

Jeremy R. Kilber, Esq.  
**Weil & Drage, APC**  
2500 Anthem Village Drive  
Henderson, Nevada 89052  
*Attorney for MSA Engineering Consultants*

DATED this 20<sup>th</sup> day of August, 2019.

/s/ Ruby Lengsavath  
An employee of SNELL & WILMER L.L.P.

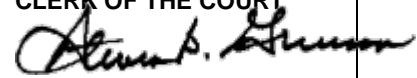
4832-6407-8497

# **EXHIBIT 1**

Complaint filed on July 11, 2019

# **EXHIBIT 1**

Complaint filed on July 11, 2019



CASE NO: A-19-798346-C  
Department 8

Justin L. Carley, Esq.  
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*Attorneys for the City of North Las Vegas*

**DISTRICT COURT  
CLARK COUNTY, NEVADA**

City of North Las Vegas,

Plaintiff,

vs.

Dekker/Perich/Sabatini Ltd.; Richardson  
Construction, Inc.; Nevada By Design,  
LLC d/b/a Nevada By Design Engineering  
Consultants; JW Zunino & Associates,  
LLC; Melroy Engineering, Inc. d/b/a MSA  
Engineering Consultants; O'Connor  
Construction Management Inc.; Ninyo &  
Moore, Geotechnical Consultants; Jackson  
Family Partnership LLC d/b/a Stargate  
Plumbing; Avery Atlantic, LLC; Big C  
LLC; Ron Hanlon Masonry, LLC; The  
Guarantee Company of North America  
USA; P & W Bonds, LLC; Paffenbarger &  
Walden, LLC; DOES I through X,  
inclusive; and ROE CORPORATIONS I  
through X, inclusive,

Defendants.

CASE NO.:

DEPT. NO.:

**COMPLAINT**

EXEMPT FROM ARBITRATION UNDER  
N.A.R. 3(A): SEEKS DAMAGES IN EXCESS  
OF \$50,000

The City of North Las Vegas files its Complaint against Dekker/Perich/Sabatini Ltd.,  
Richardson Construction, Inc., Nevada By Design, LLC d/b/a Nevada By Design Engineering  
Consultants, JW Zunino & Associates, LLC, Melroy Engineering, Inc. d/b/a MSA Engineering  
Consultants, O'Connor Construction Management Inc., Ninyo & Moore, Geotechnical  
Consultants, Jackson Family Partnership LLC d/b/a Stargate Plumbing, Avery Atlantic, LLC, Big  
C LLC, Ron Hanlon Masonry, LLC, The Guarantee Company of North America USA, P & W

1 Bonds LLC, Paffenbarger & Walden, LLC, DOES I through X, and ROE CORPORATIONS I  
2 through X (all collectively, “Defendants”), and alleges as follows:

3 **I. PARTIES, JURISDICTION, AND VENUE**

4 1. The City of North Las Vegas (“City”) is a political subdivision of the State of  
5 Nevada.

6 2. Dekker/Perich/Sabatini Ltd. (“DPS”) is a Nevada professional corporation  
7 conducting business in Clark County, Nevada.

8 3. Richardson Construction, Inc. (“Richardson Construction”) is a Nevada corporation  
9 conducting business in Clark County, Nevada.

10 4. Nevada By Design, LLC d/b/a Nevada By Design Engineering Consultants  
11 (“Nevada By Design”) is a Nevada limited liability company conducting business in Clark County,  
12 Nevada.

13 5. JW Zunino & Associates, LLC (“JW Zunino”) is a Nevada limited liability company  
14 conducting business in Clark County, Nevada.

15 6. Melroy Engineering, Inc. d/b/a MSA Engineering Consultants (“MSA”) is a Nevada  
16 professional corporation conducting business in Clark County, Nevada.

17 7. O’Connor Construction Management Inc. (“O’Connor”) is a California corporation  
18 conducting business in Clark County, Nevada.

19 8. Ninyo & Moore, Geotechnical Consultants (“Ninyo & Moore”) is a California  
20 corporation conducting business in Clark County, Nevada.

21 9. Jackson Family Partnership LLC d/b/a Stargate Plumbing (“Stargate Plumbing”) is  
22 a Nevada limited liability company conducting business in Clark County, Nevada.

23 10. Avery Atlantic, LLC (“Avery Atlantic”) is a Nevada limited liability company  
24 conducting business in Clark County, Nevada.

25 11. Big C LLC is a Nevada limited liability company conducting business in Clark  
26 County, Nevada.

27 12. Ron Hanlon Masonry, LLC is a Nevada limited liability company conducting  
28 business in Clark County, Nevada.



1           13.     The Guarantee Company of North America USA (“Guarantee Company”) is a  
2 Michigan property and casualty insurer registered with the Nevada Division of Insurance, license  
3 number 1747, conducting business in Clark County, Nevada.

4           14.     P & W Bonds LLC is a is a Nevada limited liability company conducting business  
5 in Clark County, Nevada.

6           15.     Upon information and belief, P & W Bond also does business as Paffenbarger &  
7 Walden, LLC, an Arizona Limited Liability Company conducting business in Clark County,  
8 Nevada (collectively with P & W Bonds LLC, “P & W”).

9           16.     DOES I through X, inclusive, and ROE CORPORATIONS I through X, inclusive,  
10 are individuals, contractors, subcontractors, architects, and/or designers that were involved in the  
11 construction project at issue in this case and caused or otherwise, through their acts and/or  
12 omissions, gave rise to the claims for relief in this action. The City is ignorant of the true names  
13 and capacities of the defendants sued as DOES I through X, inclusive, and ROE CORPORATIONS  
14 I through X, inclusive, and therefore sues said defendants by fictitious names. The City will amend  
15 the Complaint to allege said defendants’ true names and capacities when ascertained.

16           17.     The events at issue occurred in Clark County, Nevada.

17           18.     The construction, validity, performance, terms, and provisions of the contracts at  
18 issue in are governed by Nevada law.

19           19.     The contracts were carried out in Clark County, Nevada and provide that jurisdiction  
20 and venue are appropriate in the Eighth Judicial District Court, State of Nevada.

21           20.     The amount in controversy is in excess of \$15,000.

22           21.     This Court has personal jurisdiction over Defendants pursuant to NRS 14.065,  
23 subject matter jurisdiction over this dispute, and the Eighth Judicial District Court is the appropriate  
24 venue.

## 25                                   II.     GENERAL ALLEGATIONS

26           22.     On or about February 7, 2007, the City and DPS entered into a Professional  
27 Architectural Services Agreement (“Design Agreement”) for the design of fire station 53 (“Fire  
28 Station 53”) and prototype fire station designs. *See* Ex. 1.

1           23.     The Design Agreement specified that the City intended to construct Fire Station 53  
2 to generally consist of a new 15,000 square foot building and associated onsite and offsite  
3 improvements on a City-owned parcel on the northeast corner of Simmons Street and Gowan Road  
4 (“Project”) and future Fire Stations 50, 58, 59, 150 through 161, and 163 (“Future Fire Stations”).

5           24.     Under the Design Agreement, DPS agreed to provide the City with the following:

- 6               a.     Final design services, including services related to preparation of  
7 construction Contract Documents and construction cost estimates for the  
8 Project;
- 9               b.     Bidding phase support services, including services intended to support the  
10 City during public bidding of the Project;
- 11              c.     Construction management support services, including services intended to  
12 support the City during construction activities associated with the Project;  
13 and
- 14              d.     Prototype design services, including services intended to provide prototype  
15 designs for both 10,000 and 15,000 square foot Future Fire Stations.

16           25.     As part of the Design Agreement, DPS was responsible for the professional quality,  
17 technical accuracy, timely completion, and coordination of all services furnished by DPS and its  
18 subconsultants.

19           26.     DPS also agreed to promptly correct and revise any errors or deficiencies in its  
20 design, drawings, specifications, reports and other services.

21           27.     DPS contracted with several subconsultants on the Project, including Nevada By  
22 Design, JW Zunino, MSA, O’Connor, and Ninyo & Moore (all collectively with DPS, “Design  
23 Defendants”).

24           28.     DPS retained Ninyo & Moore to perform the preliminary geotechnical evaluation  
25 of the proposed site for Fire Station 53. *See* Ex. 2.

26           29.     Specifically, the purpose of the Ninyo & Moore study was to evaluate the sub-  
27 surface soil conditions at the site and to provide design and construction recommendations  
28 regarding geotechnical aspects of the Project.

1           30.     Ninyo & Moore provided its report to DPS on or about August 29, 2008.

2           31.     According to the Ninyo & Moore report, the site was underlain by about 1.5 feet of  
3 fill over native alluvial soil. Ninyo & Moore recommended that the fill as well as surficial loose  
4 native soils be removed and replaced with a structural fill for the building pad. The recommended  
5 thickness of the structural fill was 36 inches below building foundations or 48 inches below existing  
6 grades.

7           32.     As required by the Design Agreement, DPS created the bid set construction  
8 documents, including the submittal plans and specifications for construction of Fire Station 53  
9 (“Plans and Specs”).

10          33.     On or about October 17, 2007, Ninyo & Moore completed its review of the Plans  
11 and Specs created by DPS.

12          34.     Ninyo & Moore concluded that the Plans and Specs generally conformed with its  
13 geotechnical evaluation report.

14          35.     On or about November 2, 2007 DPS submitted structural calculations for Fire  
15 Station 53 to the City.

16          36.     The City held a public open bid for the Project on December 18, 2007.

17          37.     Richardson Construction submitted the lowest responsive bid and was awarded the  
18 Project.

19          38.     On or about January 16, 2008, the City and Richardson Construction entered into a  
20 construction contract (“Construction Contract”) for the Project. *See* Ex. 3.

21          39.     The Construction Contract outlined Richardson Construction’s scope of work to  
22 include site clearing, earthwork, masonry, structural steel roofing, interior finishes, plumbing, fire  
23 protection, heating, ventilating and air conditioning systems, electrical systems, lighting, power,  
24 telephone, data-communications, landscaping, utilities, asphalt/concrete drives, concrete sidewalk  
25 and patios, furnishing equipment, and other work included in the Construction Documents.

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28

1           40.     Richardson Construction subcontracted several companies to perform portions of its  
2 scope of work, including Jackson Family Partnership LLC d/b/a Stargate Plumbing, Avery Atlantic,  
3 LLC, Big C LLC, and Ron Hanlon Masonry, LLC (all collectively with Richardson Construction,  
4 “Construction Defendants”).

5           41.     With the Construction Contract, Richardson Construction provided three bonds for  
6 the full value of the Construction Contract, dated January 22, 2018 and issued by the Guarantee  
7 Company and P & W. *See* Ex. 3.

8           42.     These three bonds were the performance bond, bond number 70045090,  
9 (“Performance Bond”), the labor and materials payment bond, bond number 70045090, (“Payment  
10 Bond”), and the guarantee bond, bond number 70045090, (“Guarantee Bond”). *See* Ex. 3.

11           43.     On or about March 5, 2008, the City gave Richardson Construction notice to proceed  
12 with construction of Fire Station 53.

13           44.     A certificate of occupancy was issued for Fire Station 53 on or about February 25,  
14 2009.

15           45.     The notice of completion was recorded on July 13, 2009. *See* Ex. 4.

16           46.     Long after construction of Fire Station 53 was completed, the City noticed distress  
17 to the building including wall cracks and separations, and interior slab cracking.

18           47.     The City retained American Geotechnical, Inc. (“American Geotechnical”) to  
19 perform a geotechnical investigation of the site. The purpose of this investigation was to evaluate  
20 the site geotechnical conditions and to determine the probable cause of the distress to the building  
21 and surrounding appurtenances. The City also asked American Geotechnical to provide remedial  
22 recommendations. *See* Ex. 5.

23           48.     On or about December 13, 2017, American Geotechnical delivered its report to the  
24 City.

25           49.     American Geotechnical concluded that the distress to Fire Station 53 and  
26 surrounding appurtenant structures was due to a combination of excessive differential settlement  
27 and expansive soil activity.  
28

1           50.     Laboratory testing found that the soil underlying the site has high expansion  
2 characteristics.

3           51.     The distress to the building, as well as separations in the exterior flatwork, was  
4 partly related to expansive soil influences.

5           52.     Settlement of the building occurred as a result of stresses from the weight of the  
6 structure and self-weight of the earth materials. Settlement was aggravated by introduction of water  
7 to the subsoil.

8           53.     American Geotechnical concluded that Fire Station 53 likely to be impacted by  
9 continuing settlement and expansive soil influences.

10          54.     In order to reduce future problems, American Geotechnical recommend, in short,  
11 that the eastern portion of Fire Station 53 be underpinned by using a pile-grade beam system.

12          55.     The City retained Horrocks Engineers (“Horrocks”) to provide structural  
13 calculations and provide a solution to the settlement effecting Fire Station 53 while preserving the  
14 existing footings.

15          56.     On or about April 9, 2018, Horrocks provided the City with structural calculations  
16 for structural remediation of Fire Station 53.

17          57.     On or about April 22, 2019, Horrocks created, and the City approved, plans for  
18 structural remediation of Fire Station 53.

19          58.     The City held a public open bid for the Fire Station 53 structural remediation project  
20 on May 22, 2019.

21          59.     The Fire Station 53 structural remediation project generally consisted of excavation,  
22 demolition, leveling, and underpinning of parts of Fire Station 53.

23          60.     On June 10, 2019, the City announced that CMMCM LLC d/b/a Muller  
24 Construction was being recommended for award of the Fire Station 53 structural remediation  
25 project.

26          61.     Following the Fire Station 53 structural remediation project, additional work will  
27 need to be done to the cosmetic condition of Fire Station 53 to repair damage from settling of the  
28 building.

**III. CLAIMS FOR RELIEF**

**First Claim for Relief**

***Breach of Contract (The Design Agreement)***

***Against Design Defendants, DOES I through X, and ROE CORPORATIONS I through X***

62. The City repeats and incorporates every allegation contained in the preceding paragraphs.

63. The Design Agreement is a valid, existing, and enforceable contract.

64. Section VI of the Design Agreement required DPS to incorporate into all of its agreements with subconsultants that all subconsultants be bound by the terms, conditions, and obligations of the Design Agreement.

65. The City performed its obligations under the Design Agreement.

66. The Design Defendants materially breach the Design Agreement by failing to fulfill their obligations including, among other things, failing to complete their work in a good and workmanlike manner as detailed above.

67. As a direct and proximate result of the Design Defendants' breaches of the Design Agreement, the City has been damaged in excess of fifteen thousand dollars (\$15,000).

68. As a further direct and proximate result of Design Defendants' breaches of the Design Agreement, the City has been compelled to retain counsel and has incurred attorneys' fees and costs to enforce its rights and is entitled to recover same from the Design Defendants, with interest.

**Second Claim for Relief**

***Breach of Contract (The Construction Contract)***

***Against Construction Defendants, DOES I through X, and ROE CORPORATIONS I through X***

69. The City repeats and incorporates every allegation contained in the preceding paragraphs.

70. The Construction Contract is a valid, existing, and enforceable contract.

71. The City performed its obligations under the Construction Contract.

1           72.     Richardson Construction materially breach the Construction Contract by failing to  
2 fulfill its obligations including, among other things, failing to complete its work in a good and  
3 workmanlike manner as detailed above.

4           73.     As a direct and proximate result of the Richardson Construction breaches of the  
5 Construction Contract, the City has been damaged in excess of fifteen thousand dollars (\$15,000).

6           74.     As a further direct and proximate result of Richardson Construction's breaches of  
7 the Construction Contract, the City has been compelled to retain counsel and has incurred attorneys'  
8 fees and costs to enforce its rights and is entitled to recover same from the Richardson Construction,  
9 with interest.

10                               **Third Claim for Relief**

11                               ***Breach of the Covenant of Good Faith and Fair Dealing***

12                               ***Against Design Defendants, Construction Defendants, DOES I through X, and ROE***

13                               ***CORPORATIONS I through X***

14           The City repeats and incorporates every allegation contained in the preceding paragraphs.

15           75.     The Design Agreement and the Construction Contract are both valid, existing, and  
16 enforceable contracts.

17           76.     It is well established in Nevada that every contract imposes upon the contracting  
18 parties the duty of good faith and fair dealing.

19           77.     Under both the Design Agreement and Construction Contract, each of Defendants  
20 individually owes a duty of good faith and fair dealing to the City.

21           78.     Defendants each breached their duty by performing in a manner unfaithful to the  
22 purpose of the Design Agreement and/or Construction Contract.

23           79.     Defendants' actions are counter to the purpose and intent of the Design Agreement  
24 and Construction Contract.

25           80.     Defendants' denied the City's justified expectations under the Design Agreement  
26 and Construction Contract.

27           81.     As direct and proximate result of Defendants' actions, the City has been damaged  
28 in excess of fifteen thousand dollars (\$15,000).

82. As a further direct and proximate result of Defendants' breaches of the Design Agreement and the Construction Contract, the City has been compelled to retain counsel and has incurred attorneys' fees and costs to enforce its rights and is entitled to recover same from the Defendants, with interest.

**Fourth Claim for Relief**

***Negligence***

***Against Design Defendants, Construction Defendants, DOES I through X, and ROE***

***CORPORATIONS I through X***

The City repeats and incorporates every allegation contained in the preceding paragraphs.

83. During all time periods relevant to this complaint, Defendants and each of them, owed a duty to the City to use due and reasonable care and caution in performing their work on the Project.

84. Defendants and each of them breached their duty to use due and reasonable care and caution in performing their work on the Project.

85. As direct and proximate result of Defendants' actions, the City has been damaged in excess of fifteen thousand dollars (\$15,000).

86. As a further direct and proximate result of Defendants' actions, the City has been compelled to retain counsel and has incurred attorneys' fees and costs to enforce its rights and is entitled to recover same from the Defendants, with interest.

**Fifth Claim for Relief**

***Breach of Implied Warranty***

***Against Design Defendants, Construction Defendants, DOES I through X, and ROE***

***CORPORATIONS I through X***

The City repeats and incorporates every allegation contained in the preceding paragraphs.

87. Defendants are in the business of designing, constructing, and/or supervising the construction of buildings and appearances such as the one in called for in this Project.

88. Defendants impliedly warranted that their work on the Project would be performed with care, skill, reasonable expediency, and faithfulness in a workmanlike manner.



1 89. Fire Station 53 was being used in a normal and reasonably foreseeable manner.

2 90. Defendants failed to perform the work on the Project with care, skill, reasonable  
3 expediency, and faithfulness, and in a workmanlike manner as would be expected for this type of  
4 work.

5 91. As a direct and proximate result of Defendants' breaches of implied warranty, the  
6 City has been damaged in excess of fifteen thousand dollars (\$15,000).

7 92. As a further direct and proximate result of Defendants' breaches of implied  
8 warranty, the City has been compelled to retain counsel and has incurred attorneys' fees and costs  
9 to enforce its rights and is entitled to recover same from the Defendants, with interest.

10 **Sixth Claim for Relief**

11 ***Claim on Performance Bond***

12 ***Against the Guarantee Company and P & W***

13 93. The City repeats and incorporates every allegation contained in the preceding  
14 paragraphs.

15 94. Pursuant to the requirements of NRS 339.025 and the Construction Contract,  
16 Richardson Construction provided the Performance Bond for 100% of the Construction Contract  
17 amount concurrent with execution of the Construction Contract.

18 95. The Guarantee Company issued the Performance Bond in the amount of  
19 \$4,704,000.00 naming the City as the owner/obligee, and the Guarantee Company as surety, with  
20 P & W as resident agent.

21 96. Through the Performance Bond, the Guarantee Company agreed that upon the  
22 failure of Richardson Construction to adequately perform and/or complete the Project as stated in  
23 the Construction Contract, the Guarantee Company would pay the City up to an amount equal to  
24 the full penal sum of the Performance Bond.

25 97. The City has fully performed its obligations under the Construction Contract.

26 98. Defendants have materially breached the Construction Contract, and work on the  
27 Project has not been fulfilled and completed to the satisfaction of the City.  
28

101. As a further direct and proximate result of the Guarantee Company's and P&W's actions, the City has been compelled to retain counsel and has incurred attorneys' fees and costs to enforce its rights, and is entitled to recover same from the Guarantee Company and P&W actions, together with interest.

### *Against the Guarantee Company and P & W*

107. Defendants have materially breached the Construction Contract, and work on the Project has not been fulfilled and completed to the satisfaction of the City, with payments outstanding to adequately complete the work performed.

108. Defendants' breaches triggered the Guarantee Company's obligation under the Payment Bond and is now liable to the City for all damages flowing from Defendants' breaches of the Construction Contract.

109. As direct and proximate result of the Guarantee Company's and P&W's actions, the City has been damaged in excess of fifteen thousand dollars (\$15,000).

110. As a further direct and proximate result of the Guarantee Company's and P&W's actions, the City has been compelled to retain counsel and has incurred attorneys' fees and costs to enforce its rights, and is entitled to recover same from the Guarantee Company and P&W actions, together with interest.

**Eighth Claim for Relief**

***Claim on Guarantee Bond***

***Against the Guarantee Company and P & W***

111. The City repeats and incorporates every allegation contained in the preceding paragraphs.

112. Pursuant to the requirements of NRS 339.025 and the Construction Contract, Richardson Construction provided the Guarantee Bond for 100% of the Construction Contract amount concurrent with execution of the Construction Contract.

113. The Guarantee Company issued the Guarantee Bond naming the City as the owner/obligee, and the Guarantee Company as surety, with P & W as resident agent.

114. Through the Guarantee Bond, the Guarantee Company agreed to repair or replace any or all of the work performed under the Construction Contract, or pay the costs of repair.

115. The City has fully performed its obligations under the Construction Contract.

116. Defendants have materially breached the Construction Contract, and work on the Project has not been fulfilled and completed to the satisfaction of the City.

117. Defendants' breaches triggered the Guarantee Company's obligation under the Performance Bond and is now liable to the City for all damages flowing from Defendants' breaches of the Construction Contract.

118. As direct and proximate result of the Guarantee Company's and P&W's actions, the City has been damaged in excess of fifteen thousand dollars (\$15,000).

119. As a further direct and proximate result of the Guarantee Company's and P&W's actions, the City has been compelled to retain counsel and has incurred attorneys' fees and costs to enforce its rights, and is entitled to recover same from the Guarantee Company and P&W actions, together with interest.

**PRAYER FOR RELIEF**

WHEREFORE, the City prays for relief as follows:

**ON THE FIRST, SECOND, THIRD, FOURTH, AND FIFTH CLAIMS FOR RELIEF**

1. For judgment against named Defendants and in favor of the City in an amount to be proven at trial in excess of fifteen thousand dollars (\$15,000);

**ON THE SIXTH CLAIM FOR RELIEF**

1. For judgment against the Guarantee Company and P & W in the full penal sum of the Performance Bond;

**ON THE SEVENTH CLAIM FOR RELIEF**

2. For judgment against the Guarantee Company and P & W in the full penal sum of the Payment Bond;

**ON THE EIGHTH CLAIM FOR RELIEF**

3. For judgment against the Guarantee Company and P & W for the full cost of repairs to Fire Station 53;

ON ALL CLAIMS FOR RELIEF

1. For attorneys' fees;
2. For costs of the suit; and
3. For such other relief that this Court deems appropriate at the conclusion of this action.

Dated: July 11, 2019

SNELL & WILMER L.L.P.

By: 

Justin L. Carley, Esq.  
Nevada Bar No. 9994  
Aleem A. Dhalla, Esq.  
Nevada Bar No. 14188  
3883 Howard Hughes Parkway, Suite 1100  
Las Vegas, NV 89169

*Attorneys for the City of North Las Vegas*

Snell & Wilmer

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(702)784-5200

**AFFIDAVIT OF ALEEM A. DHALLA, ESQ.**

STATE OF NEVADA           )  
  ) ss.  
COUNTY OF CLARK        )

I, Aleem A. Dhalla, Esq., being first duly sworn, depose and say as follows:

1. I am an attorney with the law firm of SNELL & WILMER L.L.P., counsel for the City of North Las Vegas in this lawsuit.

2. I have personal knowledge of all matters stated below and would competently be able to testify to them if required to do so.

3. I make this affidavit pursuant to NRS 11.258.

4. In compliance with the requirements of NRS 11.258 (1), I:

- a. Have reviewed the facts of this case;
- b. Have consulted with an expert, American Geotechnical, Inc., regarding this case;
- c. Reasonably believe the expert who was consulted is knowledgeable in the relevant discipline involved in the action; and
- d. Have concluded, based on my review and consultation with the expert, that the action has a reasonable basis in law and fact.

5. Additionally, in compliance with the requirements of NRS 11.258 (3), I have attached:

- a. A resume of the expert consulted in this matter, Edred T. Marsh, P.E. of American Geotechnical Inc (Ex. 6);
- b. A statement that the expert is experienced in each discipline which is the subject of the report, specifically in the fields of geotechnical, civil, and forensic engineering (Ex. 7);
- c. A copy of each nonprivileged document reviewed by the expert in preparing the report (Exs. 2, 8, 9, 10);
- d. The conclusions of the expert and the basis for the conclusions (Ex. 5); and

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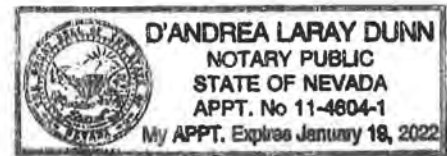
e. A statement that the expert has concluded that there is a reasonable basis for filing the action (Ex. 7).

  
Aleem A. Dhalla, Esq.

STATE OF NEVADA  
COUNTY OF CLARK

Subscribed and sworn to (or affirmed) before me on this  
11<sup>th</sup> day of July, 2019.

  
\_\_\_\_\_  
Notary Public



# **EXHIBIT 1**



**PROFESSIONAL ARCHITECTURAL SERVICES AGREEMENT  
FOR THE FIRE STATION 53  
AND PROTOTYPE FIRE STATION DESIGNS PROJECT**

**THIS PROFESSIONAL ARCHITECTURAL SERVICES AGREEMENT** (as such may be modified, amended or supplemented, the **"AGREEMENT"**) is made and entered into as of the 7th day of February, 2006, by and between the **CITY OF NORTH LAS VEGAS, NEVADA**, a political subdivision of the State of Nevada, (hereinafter referred to as **"CITY"**), and **DEKKER/PERICH/SABATINI**, a corporation established in the State of Nevada, (hereinafter referred to as **"CONSULTANT"**).

**RECITALS:**

1. The CITY intends to construct Fire Station 53, which generally consists of a new 15,000 square foot building and associated onsite and offsite improvements on a CITY-owned parcel on the northeast corner of Simmons Street and Gowan Road and future Fire Stations 50, 58, 59, 150 through 161, and 163 (hereinafter referred to as the **"IMPROVEMENTS"**).
2. The CITY desires to obtain quality professional services of the CONSULTANT to perform final design, bid phase support, and construction management support services including the preparation of Contract Documents for Fire Station 53 and substantial final design for two prototype designs for future Fire Stations 50, 58, 59, 150 through 161, and 163 (hereinafter referred to as the **"PROJECT"**) for construction of the IMPROVEMENTS; and
3. The CONSULTANT's scope of service and compensation have been arrived at after meaningful negotiations between the CITY and the CONSULTANT.

**NOW, THEREFORE**, in consideration of the above recitals and mutual promises contained herein, the parties hereto agree to the following terms, conditions and covenants set forth in Sections I through XII hereof.

**SECTION I - RESPONSIBILITY OF CONSULTANT**

In addition to any other responsibilities of CONSULTANT set forth in this AGREEMENT, CONSULTANT shall have the following responsibilities:

- A. The CONSULTANT shall be responsible for the professional quality, technical accuracy, timely completion, and coordination of all services furnished by the CONSULTANT, by CONSULTANT's subconsultants, and by any of the principals, officers, employees and agents of CONSULTANT or any subconsultant under this AGREEMENT. In performing these services, CONSULTANT shall follow practices consistent with generally accepted professional architectural standards of care. The CONSULTANT shall, without additional compensation, promptly correct and revise any errors or deficiencies in its design, drawings, specifications, reports and other services, or in any portion of the PROJECT performed by CONSULTANT's subconsultants. Approval by the

CITY of any products or services furnished by CONSULTANT shall not in any way relieve the CONSULTANT of responsibility for the professional and technical accuracy of its services.

- B. CONSULTANT shall assign Christopher W. Larsen, whose license number is 3534, as the Principal-in-Charge ("PRINCIPAL-IN-CHARGE"), and Kevin R. Thompson, whose license number is 5531, as the Project Manager ("PROJECT MANAGER"). All of the services specified by this AGREEMENT shall be performed by the PROJECT MANAGER, or by CONSULTANT's associates, employees and subconsultants under the personal supervision of the PROJECT MANAGER. Should the PRINCIPAL-IN-CHARGE or the PROJECT MANAGER be unable to complete his or her responsibility for any reason, the CONSULTANT shall notify the CITY in writing, and within four (4) calendar days thereafter, nominate a replacement for CITY approval, in its reasonable discretion, who has an equivalent amount of experience performing the same type of services as required for the PROJECT. An approved replacement shall be assigned to the PROJECT within ten (10) calendar days.
- C. In accordance with NRS 338.140, the CONSULTANT shall not produce a design and/or specification for the PROJECT which would limit the bidding, directly or indirectly, to any one specific concern unless a unique or novel product application is required to be used in the public interest, or only one brand or trade name is known to the CITY. The CITY shall be notified of and must pre-approve any sole source proposals.
- D. CONSULTANT and any subconsultant shall furnish CITY with a preliminary draft of any proposed correspondence to any federal, state or other regulatory agency for the CITY's review and approval at least seven (7) calendar days prior to mailing such correspondence.
- E. The CONSULTANT agrees that its officers, partners, employees, and subconsultants will cooperate with the CITY in the performance of services under this AGREEMENT and will be available for consultation with CITY at such reasonable times with advance notice as to not conflict with other responsibilities.

## **SECTION II - RESPONSIBILITY OF CITY**

- A. The CITY will cooperate with CONSULTANT in the performance of services under this AGREEMENT and will be available for consultation with CONSULTANT at such reasonable times with advance notice as to not conflict with their other responsibilities.
- B. The services to be performed by CONSULTANT under this AGREEMENT are subject to periodic review by the CITY. For those documents submitted to the CITY by the CONSULTANT with regard to the PROJECT, the CITY will examine and respond in writing to the CONSULTANT within fourteen (14) calendar days of receipt of such documents. It is understood that CITY comments upon review of the CONSULTANT's documents do not relieve CONSULTANT from the

responsibility for the professional and technical accuracy of all work delivered under this AGREEMENT.

- C. The CITY shall assemble selected data and information related to the PROJECT and provide same to the CONSULTANT on or prior to the kick-off meeting. The data and information to be provided by the CITY is identified as follows:

1. Drafting and plan sheet layout standards;
2. Standard "front-end" contract documents and general conditions;
3. Cover sheet format and CITY logo in AutoCAD 2005 format;
4. Copies of existing, publicly available assessors maps, record-of-surveys, parcel maps, final maps, improvement plans, drainage studies, utility plans, geotechnical studies, and survey datum which are within the PROJECT specific area; and
5. Basis of bearing, bench mark and aerial topographic mapping for the PROJECT. Aerial mapping will be in AutoCAD 2005 format with 1-foot contour intervals.

The CONSULTANT shall be responsible for updating this data and information during the PROJECT development process, and shall be responsible for acquiring supplemental data and information which the CONSULTANT deems necessary.

- D. The CITY will be responsible for performing the work noted below and upon completion will provide the results thereof to the CONSULTANT:

1. Printing of the construction bidding document package;
2. Completing the competitive bidding procedures for public works projects; and
3. Performing construction management, inspection and quality assurance during construction of the IMPROVEMENTS.

### **SECTION III - SCOPE OF SERVICES**

Services to be performed by the CONSULTANT shall consist of the Basic Services described in Exhibit "A", and may consist of those Supplemental Services described in Exhibit "A-1" of this AGREEMENT.

#### **SECTION IV - CHANGES TO SCOPE OF SERVICES**

- A. The CITY may at any time, but only by written order, make changes within the general scope of this AGREEMENT and in the services or work to be performed. If such changes cause a significant increase or decrease in the CONSULTANT's cost or time required for performance of any services under this AGREEMENT, the Parties shall formally amend this AGREEMENT. Any claim of CONSULTANT for adjustment under this clause must be asserted in writing within thirty (30) calendar days from the date of receipt by the CONSULTANT of notification of changes by the CITY, or such claim shall be deemed waived by CONSULTANT and CONSULTANT will be deemed to have agreed to the changes without modification of the compensation or time of performance hereunder.
- B. No additional compensation shall be paid, and no increase in the time of performance shall be awarded, to the CONSULTANT for changes in scope of work without the prior written authorization of the CITY to proceed with such changes.
- C. No additional compensation shall be paid to CONSULTANT for additional costs or delay due to the negligence or intentional acts of CONSULTANT or any subconsultant or any of the officers, employees, or agents of CONSULTANT or any subconsultant.

#### **SECTION V - SUPPLEMENTAL SERVICES OF CONSULTANT**

Supplemental Services will be provided only as specifically authorized in writing by the CITY's representative and may consist of any or all of the work described in Exhibit "A-1". Any other significant change of work determined by the CITY as essential to efficient and timely completion of the PROJECT shall require a formal Amendment to this AGREEMENT as provided by Section IV of this AGREEMENT.

#### **SECTION VI - SUBCONSULTANTS**

CONSULTANT agrees to include in all professional service subcontracts in connection with performance of the terms and obligations imposed under this AGREEMENT provisions in substantially the following form:

- A. CONSULTANT agrees to pay the subconsultant when CONSULTANT is paid for the subconsultant's portion of the work by the CITY and, upon written request by the CITY, to obtain and provide to CITY lien releases from the subconsultant for such payment.
- B. The subconsultant does not have any rights against the CITY.
- C. The subconsultant agrees to be bound by all terms, conditions and obligations of CONSULTANT under this AGREEMENT. CONSULTANT shall provide a copy of this AGREEMENT to each subconsultant.

D. CITY has the right in its reasonable discretion to approve every subconsultant prior to such subconsultant's performance of any portion of the PROJECT.

E. The term "subconsultant" as used herein, also means a sub-subconsultant.

## SECTION VII - TERM OF AGREEMENT

This AGREEMENT commences upon the date this AGREEMENT is approved by the CITY in a formal CITY Council proceeding and shall end one (1) year after the date the CITY makes final payment to the CONSULTANT for services rendered under this AGREEMENT, unless this AGREEMENT is terminated by the CITY.

## SECTION VIII - COMPENSATION AND TERMS OF PAYMENT

### A. TOTAL COMPENSATION

1. The CITY shall pay the CONSULTANT an amount for each of the tasks described in Exhibits "A" and "A-1" as follows:

<u>Basic Services</u>	<u>Lump Sum Amount</u>
1. <u>Final Design Services</u>	<u>\$293,110.00</u>
2. <u>Bid Phase Support Services</u>	<u>7,580.00</u>
3. <u>Construction Management Support Services</u>	<u>46,280.00</u>
4. <u>Prototype Design Services</u>	<u>161,800.00</u>
<b>Subtotal</b>	<b><u>\$ 508,770.00</u></b>

<u>Time &amp; Material Amount</u>		
<b>Supplemental Services</b>	Not-to-exceed	<b><u>\$ 30,000.00</u></b>
<b><u>Grand Total Not-to-Exceed</u></b>		<b><u>\$ 538,770.00</u></b>

### B. TERMS OF PAYMENT

1. Subject to the CITY's right to dispute any charges, the CITY shall make monthly progress payments to the CONSULTANT for services performed as follows:
  - (a) With respect to progress payments for Basic Services completed, the CITY shall pay that percentage of the lump sum amount for each task (as set forth in Subsection VIII.A.1 above) which relates to the percentage of completion of such task, less amounts paid by the CITY to CONSULTANT in prior progress payments.

- (b) With respect to Supplemental Services that are authorized in writing by the CITY's representative, the CITY shall make progress payments for completed Supplemental Services on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B".
- 2. Payment to the CONSULTANT under Section VIII.A.1 shall be made within thirty (30) calendar days of the date CITY receives each invoice provided by the CONSULTANT to the CITY, provided that such invoice is complete, correct, and undisputed by the CITY, and that it contains the following information:
  - (a) With respect to progress payments for Basic Services, the CONSULTANT shall prepare and submit to the CITY a written invoice indicating the percentage of completion of each Basic Services task set forth in Section VIII.A.1 during the invoice period. The invoice amount shall be supported with a written summary noting the various tasks worked on during the invoice period.
  - (b) For payment of Supplemental Services authorized in writing by the CITY's representative, the CONSULTANT shall prepare and submit to the CITY a written invoice of costs for the work completed during the invoice period. The invoice amount shall be determined on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B", and shall be supported by backup documentation detailing labor costs and other expenses directly related to the authorized work.
- 3. The CITY shall have fourteen (14) calendar days after receipt of an invoice to dispute any or all of the charges on the invoice. Undisputed amounts shall be paid to the CONSULTANT within thirty (30) calendar days of the date CITY receives the invoice. Disputed amounts shall be resolved through the Dispute Resolution mechanism in Section XII.N.
- 4. If the CITY fails to pay the CONSULTANT an undisputed amount within thirty (30) calendar days after the date the CITY receives the invoice, the CITY may be assessed one-half of one percent ( $\frac{1}{2}\%$ ) of the undisputed amount each month, not to exceed \$1,000 total for the PROJECT.
- 5. Billings shall be submitted during the first week of each month for work performed during the preceding month. Invoices shall conform to the format provided by the CITY.

## **SECTION IX - TIME OF PERFORMANCE**

CONSULTANT shall commence work immediately following written notice to proceed by the CITY. Work shall be completed in accordance with the PROJECT Schedule

attached as Exhibit "C", as it may be amended from time to time by written agreement between the CONSULTANT and the CITY.

If the CONSULTANT's performance of services is delayed, CONSULTANT shall notify the CITY's representative in writing of the reasons for delay and prepare a revised schedule for performance of services and submit the revised schedule to the CITY's representative. If the CONSULTANT is delayed, the CITY shall have the right to retain from monthly payments up to ten percent (10%) of subsequent invoices until such time as the CONSULTANT has complied with the schedule or presented an acceptable plan for compliance with the schedule.

No additional time shall be given to CONSULTANT for delay due to the negligence or intentional acts of CONSULTANT or any subconsultant or any of the officers, employees, or agents of CONSULTANT or any subconsultant.

#### **SECTION X - AUDIT: ACCESS TO RECORDS**

- A. The CONSULTANT shall maintain books, records, documents, and other evidence directly pertinent to performance under this AGREEMENT in accordance with generally accepted accounting principles and practices. The CONSULTANT shall also maintain the financial information and data used by the CONSULTANT in the preparation or support of the invoices, and a copy of the cost summaries and invoices submitted to the CITY. The CITY, or any of its duly authorized representatives shall have access to such books, records, documents, and other evidence for the purpose of inspection, audit and copying. The CONSULTANT will provide proper facilities for such access and inspection.
- B. Audits conducted pursuant to this provision shall be in accordance with generally accepted auditing standards and established procedures and guidelines for the reviewing or audit agencies.
- C. The CONSULTANT agrees to the disclosure of all information and reports resulting from access to records pursuant to paragraph "A" above, to any PROJECT funding agency provided that the CONSULTANT is afforded the opportunity for an audit exit conference and an opportunity to comment and submit any supporting documentation on the pertinent portions of the draft audit report.
- D. Records pursuant to paragraph "A" above shall be maintained and made available during performance under this AGREEMENT and until three (3) years from date of final payment for the PROJECT. In addition, those records which relate to any dispute resolution, litigation or appeal, or the settlement of claims arising out of such performance, or costs or items to which an audit exception has been taken, shall be maintained and made available until three (3) years after the date of resolution of such dispute, litigation, appeal, claim, or exception. This Section X.D. shall survive the completion of the PROJECT and the termination or expiration of this AGREEMENT.

- E. Public Records Act. Pursuant to NRS 239.010, each and every document provided to the CITY is a "public record" open to inspection and copying by any person, except for those documents otherwise declared by law to be confidential. The CITY shall not in any way be liable to CONSULTANT for the disclosure of any public record. In any event the CITY is required to defend an action with regard to a public records request for documents submitted by CONSULTANT, CONSULTANT agrees to indemnify, hold harmless, and defend the CITY from all damages, costs, and expenses, including court costs and attorney fees, in any action or liability arising under or because of the Nevada Public Records Act, NRS 239.010. This Section X.E. shall survive the completion of the PROJECT and the termination or expiration of this AGREEMENT.
- F. The CONSULTANT agrees to include language substantially similar to the language of paragraphs "A" through "E" of this section in all CONSULTANT subcontracts directly related to performance of services specified in this AGREEMENT which are in excess of \$10,000.00.

#### **SECTION XI - REPRESENTATIONS AND WARRANTIES**

CONSULTANT hereby represents and warrants for the benefit of CITY, in addition to any other representations and warranties made in this AGREEMENT, with the knowledge and expectation of CITY's reliance thereon, as follows:

- A. CONSULTANT is a duly formed and validly existing corporation and is in good standing pursuant to the laws of the State of Nevada, and has the full power, authority and legal right to execute, deliver and perform under this AGREEMENT.
- B. The execution and delivery of this AGREEMENT, the consummation of the transactions provided for herein, and the fulfillment of the terms hereof on the part of CONSULTANT will not result in a breach of any instrument to which CONSULTANT is a party or by which CONSULTANT is bound or of any judgment, decree or order of any court or governmental body or any law, rule or regulation applicable to CONSULTANT.
- C. The execution, delivery and performance of this AGREEMENT and the taking of all other lawful actions necessary to consummate the PROJECT contemplated hereunder, by the persons executing, delivering and performing the same on behalf of CONSULTANT, have been duly and validly authorized (and by their execution hereof or of any document delivered in connection with the PROJECT contemplated hereunder such persons individually represent and warrant that they are so authorized), and this AGREEMENT and the other agreements and instruments contemplated hereby, constitute legal, valid and binding obligations of CONSULTANT, enforceable in accordance with their respective terms.



- D. No consent, approval or authorization of any governmental authority or private party is required in connection with the execution of this AGREEMENT by CONSULTANT.
- E. The CONSULTANT's PROJECT MANAGER and PRINCIPAL-IN-CHARGE are each a duly registered Architect with the State of Nevada and each has a certificate of registration that is in full force and effect. CONSULTANT has obtained any and all licenses, certificates and permits that are required to be obtained by CONSULTANT by the Nevada Revised Statutes and the Nevada Administrative Code, and by any other law, rule, regulation or ordinance applicable to CONSULTANT and to the performance of the PROJECT by CONSULTANT.
- F. CONSULTANT is duly licensed and authorized to do business in the CITY, and CONSULTANT's business license is in full force and effect.
- G. CONSULTANT is a sophisticated and qualified CONSULTANT, whose personnel possess the level of professional expertise and experience that is necessary to properly perform the PROJECT within the required time period, with an appropriate level of diligence, skill and care, and pursuant to the terms, specifications and conditions of this AGREEMENT. CONSULTANT has the necessary personnel, equipment, tools, supplies, materials, and facilities to properly perform the PROJECT within the required time period, with an appropriate level of diligence, skill and care, and pursuant to the terms, specifications and conditions of this AGREEMENT.
- H. CONSULTANT is financially solvent, able to pay its debts as they mature, and possessed of sufficient working capital to complete the PROJECT within the time period required by this AGREEMENT, and to perform its obligations under this AGREEMENT.
- I. CONSULTANT shall require that each subconsultant performing any portion of the PROJECT:
  - 1. Is duly formed, in good standing, and authorized to do business in the State of Nevada;
  - 2. Is a duly licensed or registered Architect or Engineer, as the case may be, with the State of Nevada, and such license or certificate of registration is in full force and effect;
  - 3. Has obtained any and all licenses, certificates and permits that are required to be obtained by subconsultant by the Nevada Revised Statutes and the Nevada Administrative Code, and by any other law, rule, regulation or ordinance applicable to subconsultant and to the performance of any part of the PROJECT by subconsultant;

4. Is duly licensed and authorized to do business in the CITY, and such business license is in full force and effect; and
5. Shall comply with all laws, rules, regulations, and ordinances, as such may be amended, supplemented or modified from time to time, that are applicable to subconsultant and any portion of the PROJECT performed by subconsultant.

The representations and warranties made by CONSULTANT herein shall survive the completion of the PROJECT and the termination or expiration of the AGREEMENT.

## **SECTION XII - MISCELLANEOUS PROVISIONS**

### **A. SUSPENSION:**

CITY may suspend performance by CONSULTANT under this AGREEMENT for such period of time as CITY, in its sole discretion may prescribe, by providing written notice to CONSULTANT at least seven (7) calendar days prior to the date on which CITY wishes to suspend such performance. Upon such suspension, CITY shall pay CONSULTANT compensation based on percentage of PROJECT completion, earned until the effective date of suspension less all previous payments. CONSULTANT shall not perform further work under this AGREEMENT after the effective date of suspension until receipt of written notice from CITY to resume performance. In the event that CITY suspends performance by CONSULTANT for any cause other than the error or omission of the CONSULTANT for an aggregate period in excess of thirty (30) calendar days, CONSULTANT shall be entitled to an equitable adjustment of the compensation payable to CONSULTANT under this AGREEMENT to reimburse CONSULTANT for additional costs occasioned as a result of such suspension of performance by CITY. In no event will the CITY be liable to the CONSULTANT for more than \$2,000.00.

### **B. TERMINATION:**

The CITY may terminate this AGREEMENT, with or without cause, upon fourteen (14) calendar days prior written notification of the termination to the CONSULTANT. Notification to the CONSULTANT of such termination shall be sent by the CITY in accordance with Section XII.U.

In the event of termination, the CITY agrees to pay the CONSULTANT the reasonable value for all work and services performed to the date of termination in accordance with the Section entitled "Compensation and Terms of Payment" of this AGREEMENT.

**C. FISCAL FUNDING OUT:**

The CITY reasonably believes that sufficient funds can be obtained to make all payments during the term of this AGREEMENT. Pursuant to NRS Chapter 354, if the CITY does not allocate funds to continue the function performed by CONSULTANT obtained under this AGREEMENT, this AGREEMENT will be terminated when appropriate funds expire in accordance with Section XII.B.

**D. OWNERSHIP OF DOCUMENTS:**

All plans, drawings, specifications, reports, photographs, studies, permits, estimates, digital mapping, CAD files, mylar, or other like documents given, prepared or assembled by the CONSULTANT or any subconsultant which are related to the performance of this AGREEMENT shall be the joint property of the CITY and CONSULTANT, provided however, the rights of ownership are limited as follows:

1. The CITY may utilize the drawings and specifications with respect to the construction, maintenance, repair and modification of each of the IMPROVEMENTS and any subsequent projects.
2. Upon the CITY's prior written consent, CONSULTANT may utilize any of the constituent parts of the drawings and specifications on any other project except for any unique or distinctive architectural components or effects which taken independently or in combination would produce a project with substantially similar or distinctive features to the IMPROVEMENTS or any subsequent IMPROVEMENTS of the CITY.
3. The CITY may also utilize the original drawings and specifications with respect to any of the IMPROVEMENTS or any other subsequent IMPROVEMENTS if the CITY engages CONSULTANT or a new consultant to perform professional services with respect thereto.
4. In the event the CITY engages a new consultant to perform professional services on any of the IMPROVEMENTS or other subsequent IMPROVEMENTS utilizing the original drawings and specifications, CONSULTANT agrees to waive its copyright on the original drawings and specifications to the extent necessary for the new consultant to make modifications and changes which take into account the new site specific conditions for the new IMPROVEMENTS.
5. In the event the CITY engages the CONSULTANT to perform professional services on any of the IMPROVEMENTS or any subsequent IMPROVEMENTS utilizing the original drawings and specifications, the CITY agrees to pay the CONSULTANT re-site fees necessary for the new site adaptation of the original drawings and specifications, as mutually agreed upon in writing by the CITY and the CONSULTANT.

## **E. INSURANCE:**

CONSULTANT shall procure and maintain, and shall cause each subconsultant to procure and maintain, at its own expense, during the entire term of this AGREEMENT, the following insurances:

1. Workers' Compensation Insurance. Such insurance must be provided by an insurance company authorized to provide workers' compensation insurance in Nevada by the Nevada Department of Business and Industry, Division of Insurance. Such insurance must protect CONSULTANT and CITY from employee claims based on PROJECT related sickness, disease or accident.
2. Comprehensive General Liability (bodily injury and property damage) insurance with respect to CONSULTANT's agents and vehicles assigned to the prosecution of work under this AGREEMENT in a policy limit of not less than \$1,000,000 for combined single limit per occurrence. CONSULTANT's General Liability insurance policies shall be endorsed as to include the CITY as an additional insured.
3. Professional Liability insurance, for the protection from claims arising out of performance of professional services caused by a negligent act, error, or omission for which the insured is legally liable; such Professional Liability insurance will provide for coverage in an amount of not less than \$1,000,000 for each occurrence and \$2,000,000 in the aggregate for the period of time covered by this AGREEMENT. CONSULTANT will provide CITY thirty (30) calendar days notice in writing of any cancellation of, or material change in, the above described policy.
4. The CONSULTANT's Comprehensive General Liability policy shall automatically include or be endorsed to cover CONSULTANT's contractual liability to the CITY, to waive subrogation against the CITY, its officers, agents, servants and employees, and to provide that the CITY will be given thirty (30) calendar days notice in writing of any cancellation of, or material change in, the policy.
5. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer and licensed by the State of Nevada. All deductibles and self-insured retentions shall be fully disclosed in the Certificate of Insurance. No deductible or self-insured retention may exceed \$250,000 without the written approval of the CITY.
6. Certificates indicating that such insurance is in effect shall be delivered to the CITY before work is begun under this AGREEMENT. If the CONSULTANT is underwritten on a claims-made basis, the retroactive date shall be prior to or coincident with the date of this AGREEMENT, and

the Certificate of Insurance shall state that coverage is claims-made and the retroactive date. CONSULTANT shall provide the CITY annually with a Certificate of Insurance as evidence of such insurance. It is further agreed that the CONSULTANT and/or Insurance Carrier shall provide the CITY with 30-day advance written notice of policy cancellation of any insurance policy required to be maintained by CONSULTANT.

**F. INDEMNITY:**

Notwithstanding any of the insurance requirements herein above set forth or limits of liability set forth therein, CONSULTANT shall defend, protect, indemnify and hold harmless the CITY, its officers, agents and employees from any liabilities, claims, damages, losses, expenses, proceedings, suits, actions, decrees, judgments, reasonable attorney fees, and court costs which the CITY suffers, and/or its officers or employees suffer, as a result of, or arising out of, the intentional or negligent acts or omissions of the CONSULTANT, its subconsultants, or agents or anyone employed by the CONSULTANT or its subconsultants or agents, in fulfillment or performance of the terms, conditions or covenants of this AGREEMENT. This Section XII.F. shall survive the completion of the PROJECT and the termination or expiration of this AGREEMENT until such time as the applicable statutes of limitation expire.

**G. ASSIGNMENT:**

This AGREEMENT shall inure to the benefit of, and be binding upon, the Parties hereto and their respective successors and assigns. The CONSULTANT shall not assign, sublet or transfer its interest in this AGREEMENT without the prior written approval of the CITY representative. Nothing contained herein shall be construed as creating any personal liability on the part of any officer or agent of any public body which may be a party hereto.

**H. WAIVER:**

No consent or waiver, express or implied, by either party to this AGREEMENT or of any breach by the other in the performance of any obligations hereunder shall be deemed or construed to be a consent or waiver to or of any other breach by such party hereunder. Failure on the part of any party hereto to complain of any act or failure to act on the other party or to declare that other party in default hereunder, irrespective of how long such failure continues, shall not constitute a waiver of the rights of such party hereunder. Inspection, payment, or tentative approval or acceptance by the CITY or the failure of the CITY to perform any inspection hereunder, shall not constitute a final acceptance of the work or any part thereof and shall not release CONSULTANT of any of its obligations hereunder.

**I. DESIGNATION OF REPRESENTATIVE:**

The Director of Public Works or the Director's authorized representative is hereby designated as the CITY's representative with respect to the work to be performed under this AGREEMENT. Said representative shall only have the authority to transmit instructions, receive information, and interpret and define the CITY's policies and decisions with respect to the services of the CONSULTANT.

**J. CONSULTANT'S EMPLOYEES:**

The CONSULTANT shall be responsible for maintaining satisfactory standards of employee competency, conduct and integrity, and shall be responsible for taking such disciplinary action with respect to its employees as may be necessary. In the event that CONSULTANT fails to remove any employee from the contract work whom the CITY deems incompetent, careless or insubordinate, or whose continued employment on the work is deemed by the CITY to be contrary to the public interest, the CITY reserves the right to require such removal as a condition for the continuation of this AGREEMENT.

**K. INDEPENDENT CONTRACTOR:**

It is hereby expressly agreed and understood that in the performance of the services provided herein, the CONSULTANT and any other person employed by CONSULTANT hereunder shall be deemed to be an independent contractor and not an agent or employee of the CITY. This AGREEMENT is not intended to create, and shall not be deemed to create, any partnership, joint venture or other similar business arrangement between CITY and CONSULTANT.

**L. APPLICABLE LAW:**

This AGREEMENT shall be construed and interpreted in accordance with the laws of the State of Nevada.

**M. COMPLIANCE WITH LAWS:**

In connection with the performance of work under this AGREEMENT, the CONSULTANT agrees not to discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation or age, including, without limitation, with regard to employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including, without limitation, apprenticeship.

The CONSULTANT further agrees to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

CONSULTANT shall comply with laws, rules, regulations, and ordinances applicable to the work performed by CONSULTANT with respect to the PROJECT, as such laws, rules, regulations and ordinances may be modified, supplemented or amended from time to time.

**N. PROHIBITION AGAINST CONTINGENT FEES:**

The CONSULTANT warrants that no person or entity has been employed or retained to solicit or secure this AGREEMENT upon an agreement or understanding for a commission, percentage, brokerage or contingent fee. For breach of this warranty, the CITY shall have the right to annul this AGREEMENT without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.

**O. DISPUTE RESOLUTION:**

Disputes concerning standards of performance, time of performance, scope of work, compensation or terms specified in the AGREEMENT shall be resolved in the following manner:

1. The CITY's representative and the CONSULTANT's PROJECT MANAGER will endeavor to conduct good faith negotiations in an effort to resolve any and all disputes in a timely manner.
2. If any disputes between the Parties remain unresolved after thirty (30) calendar days, the CITY's representative and the CONSULTANT's PROJECT MANAGER shall, within fourteen (14) calendar days, prepare a brief, concise written report summarizing the:
  - (a) basis for the dispute,
  - (b) negotiations accomplished and results thereof, and
  - (c) current status of all relevant unresolved issues.

Copies of each written summary shall be exchanged between the CITY's representative and the CONSULTANT's PROJECT MANAGER, and provided to the CITY's Public Works Director and the CONSULTANT's PRINCIPAL-IN-CHARGE. Within thirty (30) calendar days thereafter, the CITY's Public Works Director, or his designee, and the CONSULTANT's PRINCIPAL-IN-CHARGE will meet to resolve the dispute. A written record of these negotiations will be made. The record will summarize:

- (a) all issues of dispute,

- (b) the resolutions to resolved issues, and
- (c) unresolved issues, if any.

The written record will be reviewed by the CITY's Public Works Director or his designee, and the CITY's Public Works Director or his designee, will render a determination regarding such dispute.

3. If the CONSULTANT disagrees with the determination of the CITY's Public Works Director, or his designee, the CONSULTANT may only initiate an action in the Eighth Judicial District Court in and for Clark County to resolve such dispute. The CITY retains the right to all remedies available in law or equity. The Parties agree that no dispute under this AGREEMENT shall be submitted to or resolved through arbitration or mediation.

**P. ATTORNEY'S FEES:**

In the event any action is commenced by either Party against the other in connection herewith, the prevailing Party shall be entitled to its reasonable costs and expenses, including reasonable attorney's fees, as determined by the court. This Section XII.P shall survive the completion of the PROJECT and the termination or expiration of this AGREEMENT.

**Q. SITE INSPECTION:**

CONSULTANT represents that CONSULTANT has visited the PROJECT location and is satisfied as to the general condition thereof and that the CONSULTANT's compensation as provided for in the AGREEMENT is just and reasonable compensation for performance hereunder including reasonably foreseen and foreseeable risks, hazards and difficulties in connection therewith based on such above-ground observations.

**R. SEVERABILITY:**

In the event that any provision of this AGREEMENT shall be held to be invalid or unenforceable, the remaining provisions of this AGREEMENT shall remain valid and binding on the Parties hereto.

**S. AMENDMENTS:**

This AGREEMENT may only be modified by a written Amendment that is executed by both Parties hereto.



**T. FINAL INTEGRATION:**

This AGREEMENT is fully integrated and constitutes the entire agreement and understanding between the Parties concerning the subject matter of this AGREEMENT. This AGREEMENT supersedes all other oral and written negotiations, agreements and understandings of any and every kind relating to the subject matter of this AGREEMENT.

**U. CONSTRUCTION:**

In the event of any dispute regarding any provision of this AGREEMENT, the terms of this AGREEMENT shall not be construed more strongly against or in favor of either party. The parties acknowledge that each has participated equally in the negotiation and drafting of this AGREEMENT.

**V. NOTICE:**

Any notice required to be given hereunder shall be deemed to have been given when sent to the party to whom it is directed by personal service, hand delivery or U.S. certified mail, return receipt requested, at the following addresses:

TO CITY: CITY OF NORTH LAS VEGAS  
Robert E. Huggins, P.E., Project Manager  
2266 Civic Center Drive  
North Las Vegas, NV 89030

TO CONSULTANT: DEKKER/PERICH/SABATINI  
Christopher W. Larsen, AIA, Managing Principal  
6860 Bermuda Road, Suite 100  
Las Vegas, NV 89119

**W. HEADINGS:**

The headings of the various Sections of this AGREEMENT have been inserted only for convenience, and shall not be deemed in any manner to modify or limit any of the provisions of this AGREEMENT, or to be used in any manner in the interpretation of this AGREEMENT.

**X. CONFIDENTIALITY:**

CONSULTANT shall treat all information relating to the PROJECT and all information supplied to the CONSULTANT by the CITY as confidential and proprietary information of the CITY and shall not permit its release by CONSULTANT's employees to other parties or make any public announcement or release without the CITY's prior written authorization. CONSULTANT shall also require subconsultants and vendors to comply with this requirement.

IN WITNESS WHEREOF, the Parties have caused this AGREEMENT to be executed the day and year first above written.

CITY OF NORTH LAS VEGAS, NEVADA

By:   
MICHAEL L. MONTANDON  
MAYOR

DEKKER/PERICH/SABATINI

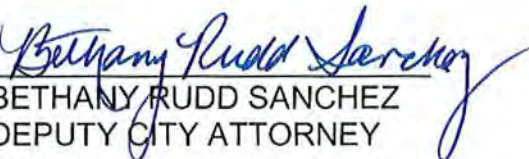
By:   
CHRISTOPHER W. LARSEN, AIA  
MANAGING PRINCIPAL

ATTEST:

By:   
KAREN L. STORMS, CMC  
CITY CLERK

APPROVED AS TO FORM:

SEAN T. MCGOWAN, CITY ATTORNEY

By:   
BETHANY RUDD SANCHEZ  
DEPUTY CITY ATTORNEY

**PROFESSIONAL ARCHITECTURAL SERVICES AGREEMENT  
FOR THE FIRE STATION 53  
AND PROTOTYPE FIRE STATION DESIGNS PROJECT**

**EXHIBIT "A"  
SCOPE OF BASIC SERVICES**

**INTRODUCTION**

This exhibit outlines the scope of work for Basic Services to be provided to the CITY by the CONSULTANT for the design and construction of the IMPROVEMENTS and the prototype design for future IMPROVEMENTS. The CITY reserves the right to cancel, re-prioritize, and/or alter the schedule of the PROJECT as identified herein. The CITY will give "Notice-To-Proceed" on a task-by-task basis.

**PROJECT DESCRIPTION**

The PROJECT consists of final design, bidding phase, and construction management support services for a new 15,000 square-foot Fire Station 53 on a CITY-owned parcel on the northeast corner of Simmons Street and Gowan Road, as shown on the attached Vicinity Map. The onsite improvements will primarily consist of the building, parking, driveways and fire access, and landscaping. The building will include an apparatus bay, shared sleep areas, locker/shower area, kitchen, recreation area, physical fitness room, and restrooms. Offsite improvements will include the construction of the within the limits of the CITY's parcel, including street base and asphalt, curb and gutter, sidewalk, driveways, and street lighting. As part of the PROJECT, the CONSULTANT shall produce final prototype drawings for both 10,000 and 15,000 square foot fire stations for exclusive use by the CITY for future IMPROVEMENTS including Fire Stations 50, 58, 59, 150 through 161, and 163 .

**STANDARDS**

The PROJECT design shall be in complete compliance with the CITY's Commercial Development Standards and Design Guideline requirements for site development, landscaping, parking, and structures. In addition, the CITY's Building Maintenance Division shall provide a list of recommended equipment and materials to be incorporated into the IMPROVEMENTS by CONSULTANT.

Locally adopted standards used for the design of the PROJECT shall include, but are not limited to, the following:

1. International Building Code, 2006, as adopted by the CITY.
2. Clark County Regional Flood Control District, Hydrologic Criteria and Drainage Design manual, current edition.
3. Uniform Standard Specifications for Public Work's Construction Off-site Improvements, Clark County Area, Nevada, current edition.
4. Uniform Standard Drawings for Public Work's Construction Off-site Improvements, Clark County Area, Nevada, Volume's I and II, current edition.

5. "Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities", Dept. of Justice Code of Regulations, 28 CFR Part 36, current edition.

When the PROJECT involves other infrastructures, the adopted standards for such, as adopted by the CITY, shall be recognized and followed. Such standards may include:

1. City of North Las Vegas Water Service District Rules and Regulations, current edition.
2. Uniform Design and Construction Standards for Water Distribution Systems, Clark County Nevada, current edition.
3. Design and Construction Standards for Wastewater Collection Systems, Southern Nevada, current edition.

### **PURPOSE**

The purpose of Exhibit A is to establish the scope for the following Tasks:

1. **Final Design Services** - Services related to preparation of construction Contract Documents and construction cost estimates for the IMPROVEMENTS.
2. **Bidding Phase Support Services** - Services intended to support the CITY during public bidding of the IMPROVEMENTS.
3. **Construction Management Support Services** - Services intended to support the CITY during construction activities associated with the IMPROVEMENTS.
4. **Prototype Design Services** – Services intended to provide Prototype designs for both 10,000 and 15,000 square foot future IMPROVEMENTS.

### **SUBCONSULTANTS**

The following subconsultants will be used for the PROJECT:

Civil:	Nevada by Design Engineering Consultants
Landscape:	JW Zunino & Associates
Mechanical/Electrical/Plumbing:	MSA Engineering Consultants
Estimating:	O'Connor Construction Management

### **TASK 1 FINAL DESIGN SERVICES**

Upon receipt of written authorization by the CITY, the CONSULTANT shall perform the services listed below. The goal of this Task is the completion of all design services necessary to provide for the public bidding and construction of the IMPROVEMENTS including furnishing plans and specifications for a 15,000 square foot facility to the CITY for review, approval, and printing. A set of construction Contract Documents shall be prepared to allow public bidding for the IMPROVEMENTS, and will consist of full size (24" x 36" or 30" x 42") mylars and reproducible-

ready specifications. Drawings will be prepared in AutoCAD 2004 edition. The drawing format will be based on standards and details provided by the CITY.

The CONSULTANT shall assume the "front end" legal and contractual sections including Invitation to Bid, Instruction to Bidders, Bid Form, General Conditions and Special Conditions will be provided by the CITY and reviewed and completed by the CONSULTANT. The CONSULTANT will provide any supplemental general conditions, Technical Specifications, and modifications to the Standard Specifications and Standard Drawings in CSI format, for insertion into the Bid Package.

### **1.1 Project Management**

The CONSULTANT shall:

- Perform day-to-day work to administer interrelated activities, manage personnel and resources, and monitor schedules and budgets; coordinate with the CITY; prepare and distribute PROJECT monthly schedule updates; and prepare and distribute monthly status reports.
- Draft schedules and status reports shall be submitted to the CITY for review and approval prior to distribution.
- Utilize the services of an independent construction cost estimator to specify the construction materials and methods necessary to meet the CITY's budget and monitor all aspects of the design effort for compliance.

### **1.2 Progress Meetings**

The CONSULTANT shall:

- Conduct monthly progress meetings during the Final Design Phase. The meetings will be attended by the CONSULTANT's Project Manager, the CITY's Project Manager, and other key personnel as determined to be necessary. Progress meetings may be held in conjunction with other scheduled meetings.
- Prepare meeting minutes recording the discussion issues, decisions, action items and status of PROJECT schedule and cost compliance.
- Prepare a draft agenda and minutes for CITY review prior to issuing final versions for distribution.

### **1.3 Design Charettes**

The CONSULTANT shall:

- Conduct design charette meetings during the Final Design Phase as necessary to obtain design guidelines and program elements from City Departments. A total of three (3) meetings are expected and will be attended, at a minimum, by the CONSULTANT's Project Manager and cost estimator, the CITY's Project Manager, and representatives from the following Departments (at a minimum): Fire, Parks & Recreation, Utilities, Planning and Zoning, Information Technology, and Public Works.

#### **1.4 90% Design Submittal**

The CONSULTANT shall:

- Prepare and submit fifteen (12) sets (4 half-size and 8 full-size) of 90% PROJECT Contract Documents for the PROJECT to the CITY for review and comment. The 90% submittal shall include: a survey monument summary table, utilities and agencies coordination record, detailed technical specifications, construction schedule, permit coordination matrices, and all CITY-supplied bid forms. In addition, an opinion of probable cost for construction and all associated IMPROVEMENT costs will be included.
- After submittal to the CITY, the CONSULTANT shall meet with the CITY and other agencies as necessary to obtain and review comments on the 90% submittal package. It is anticipated that the 90% submittal will include, at a minimum, the following drawings:

Cover Sheet and Sheet Index  
General Notes  
Symbols, Abbreviations and Design Analysis  
Civil/Utility Sheets  
Landscaping and Irrigation Sheets  
Architectural Site Sheets  
Floor Plan Sheets  
Room Finish Schedule  
Door and Window Drawings  
Reflected Ceiling Plan  
Roof Plan and Detail Sheets  
Exterior Elevation Sheets  
Building Section Sheets  
Wall Section Sheets  
Casework Details  
Furniture, Fixtures & Equipment (FF&E) Sheets  
Structural Sheets  
Plumbing Sheets  
Mechanical Sheets  
Electrical Sheets

#### **1.5 Pre-Final Submittal of Contract Documents**

The CONSULTANT shall:

- Prepare and submit to CITY fifteen (6) sets (4 half-size and 2 full-size) of Pre-Final Contract Documents, addressing and incorporating CITY and other agency comments from the 90% review.
- Provide an itemized construction schedule and updated estimate of the construction costs for the IMPROVEMENTS.
- The CONSULTANT shall meet with the CITY and other agencies as necessary to obtain and review comments on the Pre-Final submittal package.

## **1.6 Final Submittal of Contract Documents**

The CONSULTANT shall:

- Address and incorporate CITY comments from the Pre-Final review into the Final Contract Documents.
- Coordinate with and obtain necessary signatures from utilities and agencies, and provide to the CITY original, sealed plans (4 mil mylar) with a sealed, unbound copy of the specifications, special provisions, and final cost estimate.
- Provide all required plans, specifications, calculations, reports, and other documents in the necessary package format for submittal to the CITY's Building Safety Division to obtain a building permit. Revise and re-submit any of the proceeding materials as necessary to obtain approval from the Building Safety Division.
- Submit plans, specifications, calculations, reports, and other documents to other agencies and utilities (including but not limited to Nevada Power, Embarq, Cox, Southwest Gas, and Republic Services) as necessary to obtain addendum drawings for the Contract Documents and secure needed services.
- Provide other necessary documents and information as requested for CITY's PROJECT files.

## **1.7 Utility and Entity Coordination**

The CONSULTANT shall:

- Coordinate with local utility companies, other governmental agencies, including all applicable CITY Departments and Divisions, and other consultants as necessary.
- Review a sample permit matrix, provided by the CITY, and determine all permits needed for the PROJECT.
- Prepare permit applications for the CITY's signature and obtain necessary agency and utility approvals and signatures.

## **1.8 Presentations**

The CONSULTANT shall:

- Conduct a maximum of two (2) PROJECT presentations to the CITY Council, Planning Commission and/or the Chief of the North Las Vegas Fire Department summarizing the PROJECT and prepare renderings or professional quality graphic presentation materials and backup information required for such presentations. This requirement shall include neighborhood meetings or other public outreach meetings.

## **TASK 2      BIDDING PHASE SUPPORT SERVICES**

Upon receipt of written authorization by the CITY, the CONSULTANT shall perform the following tasks related to providing bidding phase support services to the CITY for the IMPROVEMENTS.

### **2.1      Pre-Bid Conference**

The CONSULTANT shall:

- Have the Project Manager only attend and participate in the Pre-Bid Conference to provide technical support.

### **2.2      Addenda Preparation**

The CONSULTANT shall:

- Assist the CITY in the preparation of Addenda to the construction Contract Documents for the PROJECT, as requested by the CITY. The CITY shall sign and issue the Addenda to the plan holders.

### **2.3      Bid Requests and Responses**

When requested by the CITY during the bidding period, the CONSULTANT shall:

- Interpret requests for clarification of the construction Contract Drawings and specifications and promptly provide CITY with written responses. The CITY will respond directly to bidder's questions.

## **TASK 3      CONSTRUCTION MANAGEMENT SUPPORT SERVICES**

Upon receipt of written authorization by the City, the CONSULTANT shall perform the following tasks related to providing construction management support services to the City for the IMPROVEMENTS.

### **3.1      Conformed Drawing Set**

The CONSULTANT shall:

- Prepare a conformed set of drawings incorporating all Addenda and changes addressed during the Bid Phase and provide reproducible copies to the CITY for reproduction and distribution to the Contractor and Construction Management Team.

### **3.2      Project Management/Progress Meetings**

The CONSULTANT shall:

- Have the Project Manager only attend the Preconstruction Conference and weekly construction progress meetings/site visits as requested by the



CITY's Construction Manager and provide a written report if requested. This subtask will be limited to a maximum of twenty (20) progress meetings/site visits.

- Review site visit observations with the Construction Manager. This task shall not be construed to include the services of a Resident Project Engineer or Architect.

### **3.3 Shop Drawing Review**

The CONSULTANT shall:

- Review and accept (or reject) all technical shop drawings, including technical submittals, re-submittals, and samples provided by the Contractor during construction. Specifically, submittals will be marked (all copies), tracked in a submittal log, and returned within seven (7) calendar days to the CITY's Construction Manager.
- Present written recommendations for items submitted by the Contractor for evaluation under a "substitution clause" but only for the limited purpose of checking for conformance with the information given and the design concepts expressed in the Contract Documents.

### **3.4 Coordination/Clarifications**

The CONSULTANT shall:

- Assist the CITY with responding to all Contractor requests for information or technical clarifications and return within seven (7) calendar days to the CITY's Construction Manager.
- Prepare drawings, details, specifications, and cost estimates as required to support construction change orders as requested by the CITY's Construction Manager.
- Provide guidance to assist the Construction Manager to resolve conflicts.

### **3.5 Pre-Final Inspection/Punch List**

The CONSULTANT shall:

- Assist the CITY in conducting pre-final inspections with CITY Construction Manager and Inspector and prepare a list of construction deficiencies for resolution by the Contractor.

### **3.6 Final Inspection**

The CONSULTANT shall:

- Assist the CITY in conducting final inspections with CITY Construction Manager and Inspector to determine that construction deficiencies noted on the punch list have been corrected. The CONSULTANT will also make recommendations to CITY regarding whether issuance of certificates of substantial completion are appropriate at the time.

### **3.7 Project Closeout**

The CONSULTANT shall:

- Prepare Record Drawings, on mylar and CD-ROM, based on the marked-up, as-constructed drawings maintained in the field by the Contractor. These drawings shall reflect all addenda, substitutions, change orders, field changes, and all deviations from the original contract documents. The marked-up drawings, PROJECT files and documents shall be returned to the CITY along with one (1) set of Mylar reproducible drawings, five (5) sets (4 half-size and 1 full-size) of copies, and an electronic copy in AutoCAD 2004 format. The CONSULTANT shall assist the CITY during the 12-month IMPROVEMENTS warranty period if corrective work is required.

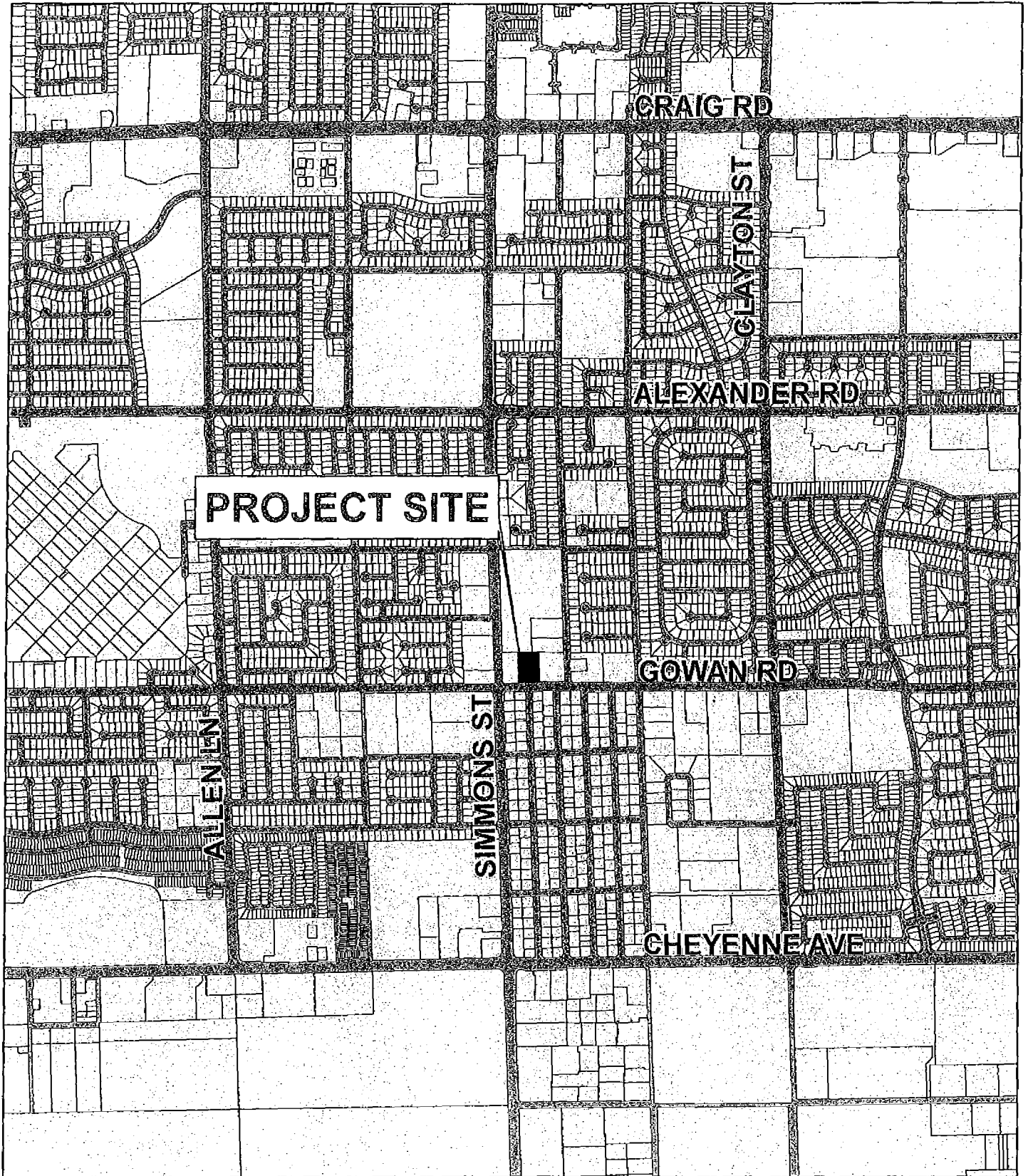
## **TASK 4 PROTOTYPE DESIGN SERVICES**

Upon receipt of written authorization by the City, the CONSULTANT shall perform the following tasks related to providing prototype design services to the City for future IMPROVEMENTS.

### **4.1 Prototype Design Submittal and Final Documents**

The CONSULTANT shall:

- After incorporating CITY comments from the 90% design submittal for the 15,000 square foot facility per Subtask 1.3, prepare and provide to the CITY (for the CITY's exclusive use on future IMPROVEMENTS) prototype drawings, on mylar and CD-ROM in AutoCAD 2004 format.
- Develop prototype drawings for a 10,000 square foot fire station facility to be used exclusively by the CITY for future IMPROVEMENTS concurrently with Task 1. The CONSULTANT will provide the same drawings as required for the 15,000 square foot prototype and IMPROVEMENTS with the exclusion of any offsite work. The drawings for this Subtask will be submitted for comments to the CITY and after incorporating CITY comments, the CONSULTANT shall prepare and provide to the CITY prototype drawings, on mylar and CD-ROM in AutoCAD 2004 format.



CITY OF  
NORTH LAS VEGAS  
*Your Community of Choice*  
DEPARTMENT OF PUBLIC WORKS  
ENGINEERING DIVISION

# FIRE STATION 53 VICINITY MAP



NOT TO SCALE

This information is for display purposes only. No liability is assumed as to the accuracy of data.

PET.APP.000895

January 9, 2007

**PROFESSIONAL ARCHITECTURAL SERVICES AGREEMENT  
FOR THE FIRE STATION 53  
AND PROTOTYPE FIRE STATION DESIGNS PROJECT**

**EXHIBIT "A-1"  
SUPPLEMENTAL SERVICES**

The CONSULTANT shall provide Supplemental Services directly related to the PROJECT when requested, and authorized in writing to do so by the CITY. Compensation for Supplemental Services shall be made pursuant to Section VIII, B.1 (b). The Fee Schedule included as Exhibit "B" shall be in effect for the duration of the PROJECT. Supplemental Services of the CONSULTANT may include any, or all of the following:

**SS 1.0 Significant Revision of Design**

The CONSULTANT shall:

- Revise the plans and specifications as necessary to accommodate significant revisions to the building design.

**SS 2.0 Supplemental Utility Potholing**

The CONSULTANT shall:

- Perform, or perform through subconsultant, supplemental potholing determined during the PROJECT to be essential to verify the horizontal and vertical location of underground utilities.

**SS 3.0 Additional Design Services**

The CONSULTANT shall:

- Provide additional architectural or engineering design services that are directly related to the PROJECT but which were not anticipated nor which could be reasonably construed to be associated with work described in Exhibit "A". Additional design services are normally identified by the CITY for the CITY's convenience.

**SS 4.0 Meetings/Site Visits**

The CONSULTANT shall:

- Attend additional progress or coordination meetings or make additional site visits in excess of the quantity specified in Exhibit "A".

## **SS 5.0 Presentations**

The CONSULTANT shall:

- Conduct additional PROJECT presentations, beyond that required in Exhibit "A", to the CITY Council, CITY Department Directors and/or other committees summarizing the PROJECT and prepare renderings or professional quality graphic presentation materials and backup information required for agenda items and meetings.

## **SS 6.0 Additional Construction Management Support Services**

The CONSULTANT shall:

- Assist the CITY on an as-needed basis in accomplishing the following:
  - Construction Management Support Services in excess of those specified in Exhibit "A".
  - Construction inspection, or additional testing and analysis work as required by the City.
  - Quality Assurance and materials testing.

**PROFESSIONAL ARCHITECTURAL SERVICES AGREEMENT  
FOR THE FIRE STATION 53  
AND PROTOTYPE FIRE STATION DESIGNS PROJECT**

**EXHIBIT "B"  
FEE SCHEDULE**

**ARCHITECTURAL LABOR**

<u>Classification</u>	<u>Hourly Rate</u>
Principal	\$ 150.00
Associate / Project Manager	\$ 125.00
Senior CAD Drafter	\$ 75.00
CAD Drafter	\$ 65.00
Intern	\$ 65.00
Administrative	\$ 45.00

These hourly-billing rates shall remain in effect for the duration of the AGREEMENT, and include direct salaries, overhead and profit.

**DIRECT EXPENSES (APPLICABLE TO THE PROJECT)**

Mileage	\$0.445/mile
Subconsultant Fees	At Cost
Reproduction	At Cost
Photocopies	
Blueline/Blackline Prints	
Mylar Drawings	
Photographs	At Cost
Permit Fees	At Cost
Other Direct Costs	At Cost

Direct Expenses (non-salary costs) shall be billed at actual cost without markup, as verified by receipt, invoices or other documentation acceptable to CITY.

**CIVIL LABOR**

<u>Classification</u>	<u>Hourly Rate</u>
Professional Engineer	\$ 135.00
Staff Designer/Engineer	\$ 110.00
Junior Designer	\$ 95.00
Technician/Drafter	\$ 85.00
Clerical/Office Support	\$ 45.00

## STRUCTURAL LABOR

<u>Classification</u>	<u>Hourly Rate</u>
Senior Structural Engineer	\$ 125.00
Structural Engineer	\$ 95.00
Senior Designer	\$ 75.00
Designer	\$ 65.00
Administrative Assistant	\$ 45.00

## LANDSCAPE ARCHITECTURE LABOR

<u>Classification</u>	<u>Hourly Rate</u>
Principal/Landscape Architect	\$ 175.00
Interpretive Planner	\$ 150.00
Landscape Architect	\$ 125.00
Landscape Project Manager	\$ 120.00
Landscape Project Coordinator	\$ 95.00
PhotoShop & Visual Simulation Expert	\$ 105.00
Estimator	\$ 105.00
CAD Operator	\$ 95.00
Senior Draftsperson	\$ 95.00
Draftsperson	\$ 85.00
Clerical	\$ 60.00
Runner	\$ 45.00

## ELECTRICAL & MECHANICAL LABOR

<u>Classification</u>	<u>Hourly Rate</u>
Principal	\$ 200.00
Engineers	\$ 175.00
Engineering Designers	\$ 110.00
Engineering Draftsman	\$ 65.00
Clerical	\$ 45.00

## ESTIMATING LABOR

<u>Classification</u>	<u>Hourly Rate</u>
Principal Estimator	\$ 180.00
Senior Estimator	\$ 135.00
Senior Scheduler	\$ 135.00

Senior Project Manager	\$ 135.00
Estimator	\$ 120.00
Scheduler	\$ 120.00
Project Manager	\$ 120.00
Clerical	\$ 45.00



PROFESSIONAL ARCHITECTURAL SERVICES AGREEMENT  
FOR THE FIRE STATION 53  
AND PROTOTYPE FIRE STATION DESIGNS PROJECT

EXHIBIT "C"

PROJECT SCHEDULE

TASK NUMBER	TASK NAME	MONTH																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	FINAL DESIGN SERVICES																		
2	BIDDING PHASE SUPPORT SERVICES																		
3	CONSTRUCTION MANAGEMENT PHASE SUPPORT SERVICES																		
4	PROTOTYPE DESIGN SERVICES																		

# **EXHIBIT 2**

**GEOTECHNICAL EVALUATION  
PROPOSED FIRE STATION 53  
WEST GOWAN ROAD NEAR SIMMONS STREET  
NORTH LAS VEGAS, NEVADA**

**PREPARED FOR:**  
Dekker/Perich/Sabatini  
6860 Bermuda Drive, Suite 100  
Las Vegas, Nevada 89119

**PREPARED BY:**  
Ninyo & Moore  
Geotechnical and Environmental Sciences Consultants  
6700 Paradise Road, Suite E  
Las Vegas, Nevada 89119

August 29, 2007  
Project No. 302288001



## Geotechnical Report Checklist

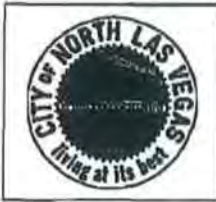
Description	Page(s)
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### I. Project Information

1. Project name	cover
2. Study date	cover
3. Consultant project identification number	cover
4. Company name and address, and name and phone number of who prepared the report	cover
5. Preparer's name, seal, and signature	cover letter
6. Client name	cover

### II. Location and Development Description

1. A written description of project location which includes adjacent street names	2
2. Vicinity map	Figure 1
3. Site plan	Figure 2
4. Types of structures to be constructed	2
5. Type of streets to be constructed	2
6. Anticipated approximate cut and fill depths	N/A
7. Anticipated building loads	2



## Geotechnical Report Checklist

Description	Page(s)
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### III. Geotechnical Investigations

1. Area or acreage	N/A
2. A site reconnaissance survey of existing surface conditions	2
3. Identification of any known or encountered geologic hazards, discuss local/regional geology	3
4. Type, description, and results of any surface geophysical surveys	N/A
5. Describe any in-situ tests conducted	Appendix B
6. Dates of investigations	3
7. Type of equipment used for field explorations	3
8. Number of borings and/or trenches	3
9. Diagram showing location of borings and/or trenching	Figure 2
10. Boring or trenching logs (continuous log): description of subsurface soils, classification of soils, identification of soil stratification zones, and approximate contact zones, including top and bottom elevations (if available), and borehole diameter	Figures A-1 through A-4
11. Location on the log of each Standard Penetration Test	Figures A-1 through A-4
12. Identify any encountered groundwater	9
13. Discuss any observed fissures, faults, or geologic hazards	5
14. Identify seismic zone	7





## Geotechnical Report Checklist

Description	Page(s)
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### IV. Laboratory Testing

1. Identify all tests performed, including procedures/standards used	Appendix B
2. All test results in tabular or graphical form	Figures B-1 through B-7

### V. Site Preparation and Grading

1. Surface clearing and approximate depth of loose soil to be removed	11
2. Required depth of ex/overexcavation in structural and pavement areas	12
3. Required depth of ex/overexcavation in nonstructural areas	12
4. Required lateral extent of ex/overexcavation	12
5. Scarification, moisture content, compaction requirements	12
6. Structural/nonstructural fill composition: expansion, gypsum solubility, percent passing #200 sieve (min/max), maximum particle size	13
7. Placement Requirements: Lift thickness, compaction (moisture and density for both granular and clayey material)	13
8. Requirements for imported fill	14
9. Caliche Considerations: Recommendations for removal of caliche, if encountered, as well as preparation and grading recommendations and recommendations for foundations and footings on caliche	13
10. Testing During Grading - type of testing required during site preparation and grading activities	13
11. Fault/fissure mitigation	N/A



## Geotechnical Report Checklist

Description	Page(s)
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### VI. Foundations/Retaining Walls

1. Conventional foundations	15
a. Required minimum depth and width of footings	15
b. Allowable bearing pressure	15
c. Anticipated settlement	17
d. Estimated friction coefficients	16
e. Cement type	24
f. Observation requirements	25
2. Post-Tensioned Foundations	N/A
a. Required minimum depth and width of footings	N/A
b. Allowable bearing pressure	N/A
c. Estimated friction coefficients	N/A
d. Cement type	N/A
e. Design center and edge of slab movement (Ym)	N/A
f. Observation requirements	N/A
3. Block Wall Foundations	N/A
a. Required minimum depths and widths of footings	N/A
b. Allowable bearing pressures	N/A
c. Cement type	N/A



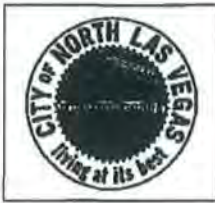
## Geotechnical Report Checklist

Description	Page(s)
d. Estimated friction coefficients	N/A
e. Observation requirements	N/A
4. Special foundations	N/A
a. Required minimum depths and widths of footings	N/A
b. Allowable bearing pressures	N/A
c. Cement type	N/A
d. Estimated friction coefficients	N/A
e. Observation requirements	N/A
5. Retaining Walls	N/A
a. Required minimum depths and widths of footings	N/A
b. Allowable bearing pressures	N/A
c. Lateral earth pressures	N/A
d. Estimated friction coefficients	N/A
e. Backfill and drainage requirements	N/A
f. Observation requirements	N/A

### VII. Slab on grade\Exterior Flatwork

1. Base requirements	17
2. Moisture barrier requirements (type, placement)	18
3. Type of cement	24





## Geotechnical Report Checklist

Description	Page(s)
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### VIII. Utility Trenches

1. Main lines (in street areas)/laterals compaction requirements	N/A
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### IX. Street and Pavement Designs

1. R-values or CBR values, Traffic Indices	9
2. Street section (AC thickness, Type I/Type II thickness), design method, and criteria	22
3. Structural base coarse - compaction recommendations	20
4. On-site pavement and street design	20

### X. Drainage Moisture Protection

1. Drainage recommendations for use in design	N/A
2. Minimum slopes away from structures	N/A
3. Landscaping recommendations	N/A

\*The items identified in sections I. through IV. shall be provided in all geotechnical reports. Reports not containing this information will be returned for correction.

\*\*The items identified in sections V. through X. are to be provided as appropriate for the specific project.

August 29, 2007  
Project No. 302288001


Mr. Chris Larsen  
Dekker/Perich/Sabatini  
6860 Bermuda Drive, Suite 100  
Las Vegas, Nevada 89119

Subject: Geotechnical Evaluation  
Proposed Fire Station 53  
West Gowan Road near Simmons Street  
North Las Vegas, Nevada

Dear Mr. Larsen:

Transmitted herein is Ninyo & Moore's geotechnical evaluation for the proposed Fire Station 53 project to be located on West Gowan Road near Simmons Street in North Las Vegas, Nevada. The purpose of our study was to evaluate the subsurface soil conditions at the site and to provide design and construction recommendations regarding geotechnical aspects of the project. We appreciate the opportunity to be of service to you on this project.

Respectfully submitted,  
**NINYO & MOORE**



Naik Banavathu, P.E.  
Project Engineer

NB/EDE/atk

Distribution: (5) Addressee



Eric D. Elison, P.E.  
Chief Geotechnical Engineer





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Figure 3 – Lateral Earth Pressures For Yielding Retaining Walls
Figure 4 – Lateral Earth Pressures For Restrained Retaining Walls
Figure 5 – Retaining Wall Drainage Detail

**Appendices**

Appendix A – Exploratory Boring Logs
Appendix B – Laboratory Testing
Appendix C – Chemical Test Results
Appendix D – Flexible Pavement Section Calculations



## **1. INTRODUCTION**

In accordance with your request, Ninyo & Moore has performed a geotechnical evaluation for the proposed Fire Station 53 project to be located on the north side of West Gowan Road east of Simmons Street in North Las Vegas, Nevada. The purpose of our study was to evaluate the sub-surface soil conditions at the site and to provide design and construction recommendations regarding geotechnical aspects of the project. This report presents the findings of our subsurface explorations, results of laboratory testing, conclusions regarding the subsurface conditions at the site, and design and construction recommendations regarding the geotechnical aspects of the proposed project.

## **2. SCOPE OF SERVICES**

The scope of our geotechnical services included the following:

- Review of pertinent background data listed in the Selected References section of this report. The data reviewed included a site plan, design codes and manuals, in-house geotechnical and soils data, and published geologic and soils information.
- Coordination and mobilization for subsurface exploration, including clearance of existing utilities at the site, which was conducted through Underground Service Alert (USA).
- Drilling, logging, and sampling of four exploratory borings, which were advanced to depths ranging from approximately 6.5 to 16.5 feet. The borings were performed to evaluate sub-surface soil conditions at the site and to obtain soil samples for laboratory testing.
- Performance of laboratory tests on selected soil samples obtained from the exploratory borings to evaluate the in-place moisture content and dry density, gradation, plasticity, consolidation characteristics, R-value, sodium content, sulfate content, sodium-sulfate content, and total salts (solubility).
- Compilation of the data obtained.
- Preparation of this report presenting our findings and conclusions and recommendations regarding earthwork, design and construction of structure foundations, concrete slabs-on-grade, exterior concrete flatwork, pavement sections for on-site parking and access areas, and preliminary pavement sections for Gowan Road.

### 3. PROJECT DESCRIPTION

We understand that the project will include design and construction of an approximately 15,000 square foot single-story fire station building. The location of the proposed building is indicated on Figure 1. It is our understanding that the fire station will have a three bay apparatus area, training rooms, crew dorms, exercise room, and auxiliary spaces for crew support. We understand that construction of the structure will consist of concrete masonry unit (CMU) load bearing walls for the apparatus bay and light gage metal stud bearing walls for the crew support area. Column loads and wall loads for the crew support area are anticipated to be approximately 30 kips and 1,600 pounds per lineal foot (plf), respectively. Wall loads for the apparatus bay are anticipated to be approximately 4,500 plf. It is also anticipated that improvements constructed at the site will include paved parking and access areas, concrete flatwork, concrete curbs and gutters, landscape areas, and concrete masonry block screen and retaining walls. We also understand that the project will include half-street improvements along the portion of Gowan Road adjacent to the site.

### 4. GENERAL SITE CONDITIONS

The subject site is contained within a portion of Clark County Assessor's Parcel No. 139-08-601-007. The site is bordered by a park to the north, Gowan Road to the south, Simmons Street to the west, and undeveloped land to the east.

At the time of our field activities, the site was generally undeveloped and the ground surface was generally covered with sparse native desert vegetation. The topography of the site was slightly to moderately undulatory and generally sloped gently downward to the east. The southwest corner of the site was approximately 15 feet higher than the remaining portion of the site. The subject site was surrounded by a chain-link fence with a locked gate. No indications of underground or overhead utilities were observed at the subject site during our site reconnaissance. However, due to development in the vicinity, underground utilities should be anticipated in and around the subject site.



## **5. SUBSURFACE EXPLORATION AND LABORATORY TESTING**

Ninyo & Moore's subsurface exploration of the site was performed on April 6, 2007. This exploration consisted of drilling, logging, and sampling of four small-diameter exploratory borings (B-1 through B-4). The borings were advanced to depths ranging from approximately 6.5 to 16.5 feet with a truck-mounted Mobile B-61 drill rig utilizing 8-inch diameter hollow-stem augers. The purposes of the exploratory borings were to generally evaluate the subsurface soil conditions at the site and to collect bulk and relatively undisturbed soil samples for laboratory testing. The boreholes were backfilled with drill cuttings after drilling operations. The approximate locations of the borings are shown on Figure 2.

Laboratory tests were performed on representative soil samples collected from the borings to evaluate in-place moisture content and dry density, gradation, plasticity, consolidation characteristics, R-value, sodium content, sulfate content, sodium-sulfate content, and total salts (solubility). Results of in-place moisture content and dry density tests are presented on the boring logs in Appendix A. The remaining laboratory test results and descriptions of the testing procedures utilized are presented in Appendix B and Appendix C.

## **6. GEOLOGY AND SUBSURFACE CONDITIONS**

Based on the findings of our subsurface exploration and review of referenced geologic and soils information, the site is underlain primarily by Quaternary-age alluvium (native soil). Ninyo & Moore's findings regarding the geologic setting, potential geologic hazards, ground motions, subsurface soils encountered, groundwater, and liquefaction at the subject site are provided in the following sections.

### **6.1. Geologic Setting**

The subject site is located in the northern portion of the Las Vegas Valley, which lies in the southwestern portion of the Great Basin, within the Basin and Range physiographic province. The Las Vegas Valley is a naturally formed structural basin as a result of block faulting, a fundamental characteristic of the Basin and Range physiographic province.



The Las Vegas Valley extends in a northwest-southeast direction and drains generally toward the southeast through the Las Vegas Wash into Lake Mead. Surrounding the alluvium-filled Valley are relatively steep mountain ranges. These ranges are the Spring Mountains to the west; the Desert, Sheep, and Las Vegas ranges to the north; the McCullough Range to the south; and Sunrise Mountain and Frenchman Mountain to the east.

The Las Vegas Valley is underlain by Proterozoic igneous and metamorphic basement rock, which is overlain by thick Paleozoic and Mesozoic sedimentary rock, and Tertiary volcanic rock. The floor of the Las Vegas Valley is filled with coalescing Tertiary and Quaternary alluvial, aeolian, and playa deposits surrounded by more steeply sloping alluvial aprons comprised primarily of poorly sorted gravel and sand deposits with cobbles and boulders. The sediments can be up to approximately 5,000 feet thick in some parts of the Las Vegas Valley.

## **6.2. Potential Geologic Hazards**

Ninyo & Moore's geotechnical study of the project site included an evaluation of the possible presence of geologic hazards, such as faults and ground fissures in the site area. This evaluation included visual observation of the site for indications of adverse geologic features and review of published geologic and soils maps and literature, and other data listed in the Selected References section of this report. Referenced geologic data were also reviewed to evaluate seismic activity levels, and associated potential earthquake hazards, for faults in the site vicinity. It should be noted that the fault seismic activity levels provided in this section were obtained/interpreted primarily from United States Geological Survey (USGS, 2007b) data.

Based on our field observations and review of referenced data, no faults extend through the project site. Review of referenced geologic data indicates that the nearest active fault (i.e., a fault that has experienced ground surface rupture within the past 11,000 years) to the site is the Black Hills fault. The Frenchman Mountain fault and the Eglington fault, which are considered potentially active (i.e., faults that have been experienced ground surface rupture



within the past 1.6 million years) are also located in the site vicinity. The distances from the site to these active and potentially active faults are provided on Table 1. Fissure zones were measured approximately 3,000 feet from the subject site.

Review of referenced geologic data also indicates that the site is located near an unnamed Las Vegas Valley fault. The distance from the site to this fault is provided on Table 1. Referenced USGS data indicate that this fault is of uncertain origin and that its seismic activity level has not been established. Further, there is some controversy among geologists as to the origin of this geologic feature, and other similar features in Las Vegas Valley, which have been previously referred to as "compaction faults". Differing proposed origins for these faults include:

- Differential consolidation or compaction over time of the thick alluvial and lakebed sediments in Las Vegas Valley.
- Tectonic factors associated with faults that may extend into the basement bedrock beneath the Valley's sediment.
- A combination of differential consolidation and tectonic factors.

**Table 1 – Faults in Site Vicinity**

<b>Fault Name</b>	<b>Seismic Activity Level *</b>	<b>Approximate Distance From Project Site to Fault (miles)</b>
Black Hills fault	Active	22
Eglinton fault	Potentially Active	2
Frenchman Mountain fault	Potentially Active	9
Las Vegas Valley fault (unnamed fault)	Not Established	<1
* From United States Geological Survey (USGS, 2006) data.		

Ground fissures, generally believed to be caused by erosion, and differential stress resulting from regional subsidence due primarily to withdrawal of groundwater, are known to occur near faults in Las Vegas Valley. Review of referenced geologic data does not indicate the presence of ground fissures at the project site and no ground fissures were observed during

our field activities. However, it should be noted that a portion of the ground surface at the site had been disturbed/obscured by previous grading activities.

As part of this study, Ninyo & Moore evaluated whether the project site is located in a Special Geotechnical Considerations Area, as shown on the referenced Clark County Soil Guidelines Map (CCBD, 1998). This map indicates important aspects of near-surface soils in Las Vegas Valley. The following summarizes conditions in each of the areas shown on the map.

- Special Geotechnical Considerations Area - Steep Slopes (greater than 15 percent) and Shallow Bedrock.
- Special Geotechnical Considerations Area - Subsidence and 2,000-Foot Compaction or Seismic Fault Buffer Zone: Indicates areas which are considered to contain 90 percent of mapped ground fissures. These ground fissure areas extend approximately 1,000 feet to each side of faults.
- Special Geotechnical Considerations Area - Potential Drainage Areas or Recent Sediment Deposits, which may also have Solubility, Clay Swell, Corrosion, Gypsum Salt, Expansive or Hydro-collapsible Potential: Indicates areas located in the vicinity of major drainages, which may also contain potentially moisture-sensitive and corrosive soils.
- Special Geotechnical Considerations Area - Solubility, Clay Swell, Corrosion, Gypsum Salt, Expansive or Hydro-collapsible Potential: Indicates areas of potentially moisture-sensitive and corrosive soils.
- Standard Geotechnical Considerations Area - Mixed Alluvial Sand and Gravel: Indicates areas of generally coarse-grained granular soils.

Review of the Clark County Soil Guidelines Map indicates that the project site is located in a *Special Geotechnical Considerations Area - Solubility, Clay Swell, Corrosion, Gypsum Salt, Expansive or Hydro-collapsible Potential*.

The Clark County Expansive Soil Guidelines Map (Clark County Development Services Department, 2006) indicates general trends of near-surface soils in Las Vegas Valley. This map shows areas of the valley where previous geotechnical studies have indicated the presence of moderately, highly, and critically expansive soils. Based on review of the map, the subject site, project alignment is located in an area prone to critically expansive soil.



### 6.3. Ground Motions

Using the referenced United States Geological Survey database (USGS, 2007a), estimated maximum considered earthquake spectral response accelerations for short (0.2 second) and long (1.0 second) periods were obtained for the subject site, which is located at approximately 36.2251 degrees north latitude and -115.1795 degrees west longitude. Based on the referenced International Building Code (ICC, 2006) and subsurface soils encountered in our exploratory excavations, seismic Site Class D is appropriate for the subject site, and the parameters in the following table are characteristic of the subject site for design purposes.

**Table 2 – Seismic Design Parameters**

Parameters	Value		Reference (ICC, 2006)
	Short Period	Long Period	
Mapped Maximum Considered Earthquake Spectral Response Acceleration, $S_s$ and $S_1$	0.55g	0.17g	Figure 1613 and referenced database (USGS, 2007a)
Site Coefficient, $F_a$ and $F_v$	1.36	2.10	Table 1613.5.3
Maximum Considered Earthquake Spectral Response Acceleration Adjusted for Site Class Effects, $S_{MS}$ and $S_{M1}$	0.75g	0.37g	Equation 16-37 and 16-38
Design Spectral Response Acceleration, $S_{DS}$ and $S_{D1}$	0.50g	0.24g	Equation 16-39 and 16-40

### 6.4. Subsurface Soils Encountered

Generalized descriptions of the subsurface soils encountered in our borings are provided in the following sections.

#### 6.4.1. Fill

Fill, up to approximately 1.5 feet thick, was encountered in one of our four exploratory borings. This fill consisted primarily of medium dense, silty gravel with sand, and clayey sand with gravel. The encountered fill was generally damp.

#### **6.4.2. Native Soil**

Native soil (alluvium) was encountered in the exploratory borings to the total depths explored (up to approximately 16.5 feet). The alluvium consisted primarily of loose to medium dense, silty and clayey sand, and stiff to very stiff, sandy lean to fat clay. The encountered soils were generally damp to moist and some of the soils were slightly cemented. Some of these native soils were slightly to highly gypsiferous. Visual observations indicated that the encountered alluvium was slightly to moderately porous in some areas.

Although not encountered in our borings at the site, cemented soils (caliche) are typically present in subsurface soils in many areas of the Las Vegas Valley. Caliche is a naturally occurring cemented soil with rock-like characteristics. The following describes typical properties of caliche encountered in southern Nevada.

- Caliche generally occurs in layers a few inches to several feet thick.
- Caliche layers can vary significantly in the thickness, degree of cementation, and hardness over short distances, and it can be discontinuous.
- Caliche varies in composition from primarily fine-grained material to primarily coarse-grained material.
- Moderately hard, moderately cemented caliche can generally be gouged with a knife with difficulty and can be broken with a few hammer blows.
- Hard to very hard, strongly cemented caliche is difficult to scratch with a knife and breaks with difficulty with repeated hammer blows.
- Considerable difficulties may be encountered in caliche removal. Rock excavation methods may be needed.

Laboratory tests were performed on selected samples of native soil obtained from the borings. The results of these tests are summarized in the following table. The results of in-place moisture content and dry density tests are also presented on the boring logs in Appendix A. Additional information regarding the laboratory test procedures and results are provided in Appendix B and Appendix C.



**Table 3 – Summary of Laboratory Test Results**

<b>Test Type</b>	<b>Test Results</b>	<b>Remarks</b>
In-Place Moisture Content	5.4 to 46.5 percent	--
In-Place Dry Density	61.7 to 108.7 pounds per cubic foot (pcf)	--
Atterberg Limits Liquid Limit Plastic Limit Plastic Index	36 and 41 16 and 20 25 and 16	Moderate plasticity
Consolidation Expansion Potential	4.0 and 5.9 percent expansion	High expansion potential
R-Value	19	--
Sodium Sulfate Content	0.04 and 0.39 percent	Negligible to low chemical heave (salt heave) potential
Sodium Content	0.01 and 0.13 percent	--
Sulfate Content	0.34 and 0.38 percent	Severely deleterious to concrete
Total Salts (Solubility)	0.79 and 0.88 percent	Moderate solubility potential

### 6.5. Groundwater

Groundwater was not encountered in the exploratory borings, which were advanced to depths of up to approximately 16.5 feet. Seasonal fluctuations in groundwater levels and surface water flow may occur. These fluctuations may be due to variations in ground surface topography, subsurface geologic conditions, rainfall, irrigation, and other factors. Evaluation of factors associated with groundwater fluctuations was beyond the scope of this study.

### 6.6. Liquefaction

Liquefaction is a phenomenon in which loose, saturated soils lose shear strength under short-term (dynamic) loading conditions. Ground shaking of sufficient duration results in the loss of grain-to-grain contact in potentially liquefiable soils due to a rapid increase in pore water pressure, causing the soil to behave as a fluid for a short period of time. To be potentially liquefiable, a soil is typically cohesionless with a grain-size distribution generally consisting of sand and silt. It is generally loose to medium dense, saturated, and subjected to sufficient magnitude and duration of ground shaking.

Soils encountered in the exploratory borings at the site were unsaturated and consisted primarily of loose to medium dense, silty and clayey sand, and stiff to very stiff, sandy lean to fat clay.

## 7. FINDINGS AND CONCLUSIONS

Based on the findings of this study, there are no known geotechnical or geologic conditions that would preclude construction of the proposed project, provided the geotechnical recommendations presented herein are adequately implemented. Geotechnical design and construction considerations for the subject project include the following:

- Based on our findings, it is our opinion that the existing fill soils and underlying near-surface alluvial (native) soils, which are moderately porous, highly gypsiferous, and have a high expansion potential, are not suitable for support of the proposed structures and improvements in their present condition. These soils will need to be removed from structure and improvement areas and replaced with adequately compacted structural fill.
- Based on the results of the field and laboratory evaluations, it is our opinion that foundations for proposed structures should be founded on a zone of adequately compacted structural fill. Concrete slab-on-grade floors, pavement, exterior concrete flatwork and other improvements should also be founded on a zone of compacted structural fill.
- Soils encountered in the exploratory borings appeared to be generally suitable for use as structural fill and backfill. However, our findings indicate the presence of highly gypsiferous (potentially water-soluble) and highly expansive soil at the subject site. If encountered during grading, these soils will need to be either adequately blended or exported from the site. The excavated on-site soils may be used as structural fill and backfill provided they meet recommendations presented in Section 8.1.2.
- Chemical test results performed on selected soil samples from the exploratory borings indicate that on-site soils should be considered severely deleterious to concrete.
- Review of published geologic data and our field observations do not indicate the presence of adverse on-site geologic hazards, such as faults and ground fissures, which may affect proposed site development.
- Groundwater was not encountered in our boring, which was excavated to a depth of approximately 16.5 feet.



- In accordance with the 2006 International Building Code, the seismic parameters provided in Table 2 are characteristic of the site and should be considered in the design of proposed structures.
- Layers of cemented soils (caliche) were not encountered in our exploratory borings performed at the project site. However, due to the variable nature of caliche, caliche layers may be encountered in areas between and beyond our boring locations during earthwork operations.
- Based on the unsaturated generally fine-grained nature of the soils encountered in the exploratory borings at the site, it is our opinion that there is a low potential for liquefaction of the subsurface soils at the site.

## **8. RECOMMENDATIONS**

The following recommendations are intended for incorporation into the design and construction of the subject project.

### **8.1. Earthwork**

The following subsections provide recommendations for earthwork, including site grading, structural fill and backfill, import soil, and temporary excavations.

#### **8.1.1. Site Grading**

Prior to grading, proposed structure and improvement areas should be cleared of any surface obstructions, debris, organics (including vegetation), and other deleterious material. Materials generated from clearing operations should be removed from the project site and disposed of at a legal landfill site. We recommend that the full depth of on-site fill and surficial loose and/or disturbed native soils be removed from proposed structures and improvement areas, including building, block screen/retaining wall, pavement, and exterior concrete flatwork areas. These removed soils can be processed and stockpiled for later use as structural fill, if needed.

Based on the findings of our subsurface exploration and results of laboratory tests, the near-surface native soils have a high expansion potential and moderate solubility

potential, are slightly to moderately porous, and are highly gypsiferous. To reduce the potential for future soil-related movement, we recommend that near-surface native soils in areas of proposed structures and improvements be overexcavated and replaced with structural fill. Surface preparation and overexcavation should extend 5 feet beyond the exterior edges of building lines and 2 feet beyond block wall foundations, exterior concrete flatwork, and pavement areas, or to a distance that is equivalent to the depth of compacted structural fill below the structure, whichever is greater. The following table summarizes recommended overexcavation depths needed to provide an adequate layer of structural fill beneath proposed structures and improvements.

**Table 4 – Summary of Recommended Structural Fill Thickness**

<b>Proposed Improvement</b>	<b>Recommended Structural Fill Thickness*</b>
Building Foundations	36 inches below foundations, or 48 inches below existing grade, whichever is lower.
Floor Slabs	36 inches below supportive gravel, or 48 inches below existing grade, whichever is lower.
Retaining/Screen Wall Foundations	24 inches below foundations, or 36 inches below existing grade, whichever is lower.
Exterior Concrete Flatwork and Pavement	24 inches below supportive gravel (Type II Aggregate Base) or 24 inches below existing grade, whichever is lower.
* Structural fill thickness may include 6 inches of scarified, moisture-conditioned, and compacted native soils. Any undocumented fill and loose and/or disturbed native soils should be removed from proposed building and exterior site improvement areas.	

The geotechnical consultant should observe areas to receive fill at the time of grading to assess the suitability of the exposed material and to evaluate if removals down to more competent soils are needed. After the removals described above have been made, the exposed surface in the bottom of overexcavations should be scarified to approximately 6 inches, moisture-conditioned to generally above optimum moisture content, and re-compacted to 90 percent, as evaluated by American Society for Testing Materials (ASTM) Standard D 1557



Layers of cemented soils (caliche) were not encountered in our exploratory borings performed at the project site. However, due to the variable nature of caliche, caliche layers may be encountered in areas between and beyond our boring locations during earthwork operations. If caliche is encountered, rock excavation techniques should be anticipated during grading, trenching, and other earthwork operations. Use of heavy-duty ripping equipment, heavy-duty backhoe, headache ball, ho-ram, or rock saw should be anticipated. The contractor should be aware of the potential for (and take adequate precautions to reduce the potential for) vibrational damage to adjacent or nearby structures, and take appropriate precautions, when using heavy impact equipment or blasting during removal of caliche.

Some shrinkage should be anticipated when on-site soils are excavated, processed, and compacted. For planning purposes, an estimated shrinkage factor of approximately 25 percent may be used for soils within approximately 5 feet of the existing ground surface. Depending on finished grade elevations for the project, some importation of soils may be needed.

#### **8.1.2. Structural Fill and Backfill**

Soils used as structural fill and backfill should be placed and compacted in uniform horizontal lifts to a relative compaction of 90 percent, as evaluated by ASTM D 1557. Structural fill and backfill soils should not contain organic matter, debris, other deleterious matter or rocks and/or hard chunks larger than approximately 6 inches nominal diameter. These soils should have a low solubility potential (1.5 percent or less, as evaluated by the referenced Clark County Development Services Department, Technical Guideline TG-19-2001), and a swell potential of 12 percent or less, as evaluated by Section 1802.3.3 of the Southern Nevada Amendments to the 2006 International Building Code.

Structural fill and backfill soils should be placed and compacted at a moisture content generally above optimum moisture content. The optimal lift thickness of fill placed

during grading will depend on the type of soil and compaction equipment used, but should generally not exceed approximately 8 inches in loose thickness. Placement and compaction of structural fill should be performed in accordance with the referenced Clark County (2003) Uniform Standard Specifications for Public Works Construction (USSPWC). Grading and earthwork operations should be observed and the geotechnical consultant should test moisture and relative compaction of structural fill and backfill materials. Typically, one field test and no less than three field tests should be performed per lift for each 500 cubic yards of fill placement in structural areas. Additional field tests may also be performed in structural and non-structural areas at the discretion of the geotechnical consultant.

#### **8.1.3. Import Soil**

We recommend that import soil consist of coarse-grained (50 percent or more retained on No. 200 sieve) material with a low solubility potential (1.5 percent or less, as evaluated by the referenced Clark County Development Services Department, Technical Guideline TG-19-2001), a low sulfate content (less than 0.1 percent), and a swell potential of 12 percent or less, as evaluated by Section 1802.3.3 of the Southern Nevada Amendments to the 2006 International Building Code. Import soil should not contain organic matter, debris, other deleterious matter or rocks and/or hard chunks larger than approximately 6 inches nominal diameter. We further recommend that proposed import material be evaluated by a Ninyo & Moore representative at the borrow site for its suitability prior to importation to the project site. Import soil used as structural fill and backfill should be placed and compacted in accordance with recommendations provided in the previous section.

#### **8.1.4. Temporary Excavations**

Temporary slope surfaces should be kept moist to retard raveling and sloughing. Water should not be allowed to flow over the top of excavations in an uncontrolled manner. Stockpiled material and/or equipment should be kept back from the top of excavations a distance equivalent to the depth of the excavation or more. Workers should be protected



from falling debris, sloughing and raveling in accordance with OSHA regulations (OSHA, 2005). Temporary excavations should be observed by the geotechnical consultant so that appropriate additional recommendations may be provided based on the actual field conditions. Temporary excavations are time sensitive and failures are possible.

## **8.2. Structure Foundations**

Structure foundations including building and screen/retaining wall foundations should be founded on a zone of adequately placed and compacted structural fill (reworked fill, native, or import soils) as indicated in section 8.1.1. Building and retaining wall foundations should be approximately 12 inches wide and should be embedded approximately 18 inches below adjacent grade. An allowable bearing pressure of 1,100 pounds per square foot (psf) may be used for conventional (isolated or continuous) footings with an embedment depth of 18 inches below adjacent grade and a width of 12 inches. This allowable value may be increased by 300 psf for each additional 1 foot of width and 700 psf for each additional 1 foot of embedment up to a value of 2,500 psf. The allowable bearing pressure may be increased by one-third for short duration loads, such as wind or seismic. Lateral resistance for footings is presented in Section 8.3. Seismic parameters for design of structures at the site are provided in Table 2 in Section 6.3 and on Figure 3 and Figure 4. Foundations should be designed and constructed in accordance with the recommendations of a qualified structural engineer.

Conventional footings should be reinforced with four No. 4 or larger steel reinforcing bars, two placed near the top and two near the bottom of the footing, and in accordance with a qualified structural engineer's recommendations. Increased reinforcement may be recommended by the structural engineer.

## **8.3. Lateral Earth Pressures**

Retaining walls that are not restrained from movement at the top with level backfill behind the wall, may be designed using an "active" equivalent fluid unit weight of 42 pounds per cubic foot (pcf), as indicated on Figure 3. Retaining walls that are restrained from movement

at the top with level backfill behind the wall, may be designed using an "at-rest" equivalent fluid unit weight of 62 pcf, as indicated on Figure 4. These values assume compaction within about 5 feet of the wall will be accomplished with relatively light compaction equipment and that very low to low expansive backfill will be placed behind the wall. These values also assume that retaining walls will have a height of less than 10 feet.

Ninyo & Moore evaluated "active" and "at-rest" dynamic lateral earth pressures due to seismic loading based on the referenced Southern Nevada Amendments to the 2006 International Building Code (Clark County et al., 2006). Ninyo & Moore recommends that retaining walls that are not restrained from movement at the top be designed using an "active" resultant force due to seismic loading as indicated in the equation below:

$$R_{e \text{ (active)}} = 9H^2 \text{ pounds per unit width (in feet) of wall}$$

where H = height of the wall in feet

Ninyo & Moore recommends that retaining walls that are restrained from movement at the top be designed using an "at-rest" resultant force due to seismic loading as indicated in the equation below:

$$R_{e \text{ (at-rest)}} = 23H^2 \text{ pounds per unit width (in feet) of wall}$$

where H = height of the wall in feet

The resultant forces should be applied 0.6H above the base of the wall, as indicated on Figure 3 and Figure 4.

Retaining walls with level backfill should also be designed to resist "active" and "at-rest" surcharge pressures of 0.35q and 0.51q, respectively. The value for "q" represents the pressure induced by adjacent light loads, slab, or traffic loads plus any adjacent footing loads.

Measures should be taken so that moisture does not build up behind retaining walls. Drainage measures, as indicated on Figure 5, should include free-draining backfill material, and perforated drain pipes or weep holes lined with polyvinyl chloride (PVC) pipe. Drain pipes



should outlet away from structures, and retaining walls should be adequately waterproofed in accordance with the recommendations of the project civil engineer or architect.

For passive resistance to lateral loads, we recommend that an equivalent fluid weight of 275 pcf be used up to a value of 2,000 psf. This value assumes that the ground is horizontal for a distance of 10 feet or more, or three times the height generating the passive pressure, whichever is greater. We recommend that the upper 12 inches of soil not protected by pavement or a concrete slab be neglected when calculating passive resistance. For frictional resistance to lateral loads, we recommend that a coefficient of friction of 0.37 be used between soil and concrete. Passive and frictional resistances may be used in combination, provided the passive resistance does not exceed one-half of the total allowable resistance. The passive resistance may be increased by one-third when considering loads of short duration such as wind or seismic forces.

#### **8.4. Settlement**

Ninyo & Moore estimates that the proposed structures, designed and constructed as recommended herein, should undergo total settlement of approximately 1 inch. Differential settlement is typically limited to one-half the total amount. As discussed, relatively porous soils with a high expansion potential were encountered in our borings. If the soils below the zone of structural fill become significantly wetted, additional settlement may occur. Measures to reduce water infiltration into the subsoils is discussed in Section 8.9.

#### **8.5. Concrete Slab-On-Grade Floors**

Ninyo & Moore recommends that conventional concrete slab-on-grade floors for this project be founded on approximately 6 inches of Type II Aggregate Base (USSPWC Section 704.03.04) overlying a zone of adequately placed and compacted structural fill (reworked fill, native, or import soils) as indicated in section 8.1.1. The floor slabs should be approximately 4 inches in thickness and reinforced with No. 4 steel reinforcing bars placed at approximately 18 inches on-center both ways. Reinforcement of the slab should be placed at mid-height. We recommend that "chairs" be utilized to aid in the placement of the



reinforcement. As an alternative to slab reinforcement with No. 4 steel reinforcing bars, post-tensioned slab reinforcement, as designed by a qualified structural engineer, may be utilized. Additional geotechnical recommendations for design of post-tensioned slabs will be provided by Ninyo & Moore upon request. Type II Aggregate Base underlying concrete slab-on-grade floors should be moisture conditioned, placed, and compacted to 90 percent of the laboratory maximum dry density in accordance with ASTM D 1557.

As a means to reduce shrinkage cracks, we recommend that the conventional slabs-on-grade be provided with control joints at intervals of no more than approximately 15 feet each way. Floor slab reinforcement and joint spacing should be in accordance with the recommendations provided by a qualified structural engineer. Greater slab reinforcement and reduced control joint spacing may be recommended by the structural engineer.

Ninyo & Moore recommends that a vapor retarder be provided by a relatively impervious membrane placed beneath slab-on-grade floors, particularly in areas where moisture-sensitive flooring is planned. The membrane should consist of visqueen 10 mils in thickness, or equivalent. The visqueen may overlie or underlie the previously described compacted Type II Aggregate Base material. If the visqueen overlies the base material, it should be covered with approximately 2 inches of moist sand (not saturated) to help reduce the potential for puncture during construction and to aid in concrete curing.

#### **8.6. Exterior Concrete Flatwork and Curbs and Gutters**

Exterior concrete flatwork, such as walkways and other slabs, should be approximately 4 inches in thickness and founded on approximately 6 inches of Type II Aggregate Base overlying a zone of adequately placed and compacted structural fill (reworked fill, native, or import soils) as indicated in section 8.1.1. It is suggested that to reduce the potential for shrinkage cracks, exterior concrete flatwork should be constructed with control joints spaced approximately 5 feet apart for walkways and approximately 10 feet on-center each way for larger slabs. Crack control joint spacing should be in accordance with recommendations of a

qualified structural engineer. Reduced joint spacing may be recommended by the structural engineer.

Structural fill and Type II Aggregate Base beneath flatwork should be moisture-conditioned, placed, and compacted to 90 percent relative compaction. Concrete walkways and other exterior slabs should be approximately 4 inches thick. To reduce the potential for shrinkage cracks, exterior concrete slabs should be constructed with control joints spaced approximately 5 feet apart for walkways and approximately 10 feet on-center each way for larger slabs. Crack control joint spacing should be in accordance with recommendations of a qualified structural engineer. Reduced joint spacing may be recommended by the structural engineer.

Formation of shrinkage cracks in concrete slabs, and other cracks due to minor soil movement, may be further reduced by utilizing steel reinforcement, such as welded wire mesh. However, due to the inherent difficulty in positioning welded wire mesh in the middle of concrete slabs, other crack control methods should be considered, such as placement in the concrete of No. 3 steel reinforcing bars at approximately 18 inches on-center each way. Reinforcement of the slabs should be placed at approximately mid-height in the concrete utilizing "chairs."

Concrete curbs and gutters should be constructed in accordance with recommendations of the project civil engineer. The referenced Clark County Uniform Standard Drawings for Public Works Construction Off-Site Improvements (USDPMC) also provides design specifications for curbs and gutters. Recommendations regarding concrete utilized in construction of proposed improvements are provided in Section 8.8.1.

#### **8.7. Pavement Sections**

The following subsections provide pavement sections for on-site parking and access areas, and off-site half-street improvements along portions of Gowan Road adjacent to the subject site.



**8.7.1. On-Site Parking and Access Areas**

To form a basis for design of flexible pavement for on-site paved parking and access areas, we have assumed the following:

- An Equivalent Single Axial Load (ESAL) value of 2,960, based on Traffic Index (TI) = 4.5 for automobile traffic; an ESAL value of 15,950, based on TI = 5.5 for delivery truck traffic; and an ESAL value of 64,920, based on TI = 6.5 for heavy duty truck traffic areas are applicable.
- 80 percent reliability.
- 0.45 standard deviation.
- 4.2 initial serviceability.
- 2.5 terminal serviceability.
- Resilient Modulus ( $M_R$ ) of 3,500 psi for an R-value of 10 (based on soil classification).

Using these values, structural numbers were calculated using design procedures in accordance with the American Association of State Highway and Transportation Officials method of designing flexible pavement (AASHTO, 1993). The following table presents the recommended structural pavement sections placed over structural fill for on-site parking and access areas:

**Table 5 – Pavement Sections for On-Site Parking and Access Areas**

Traffic Type	Design ESAL	Pavement ( $a_{\text{asphalt}} = 0.35$ )	Base ( $a_{\text{base}} = 0.12$ )	Recompacted Subgrade	Structural Number Provided	Structural Number Needed
		Asphalt Thickness (Inches)	Type II Base Thickness (Inches)	Thickness (Inches)*		
Automobile	2,960	3.0	5.0	24	1.65	1.63
Delivery Truck	15,950	3.5	8.0	24	2.18	2.17
Heavy Duty Truck	62,920	4.0	12.0	24	2.84	2.73
*Recompacted subgrade below pavement sections may include 6 inches of scarified native soil compacted to 95 percent relative compaction (as evaluated by ASTM D 1557).						



If the assumed traffic or design ESAL values are not considered appropriate, this office should be notified. In providing these recommendations for pavement sections, we have assumed that asphalt concrete will be mixed and placed in accordance with Section 401 of the referenced Clark County Uniform Standard Specifications for Public Works' Construction, Off-Site Improvements (USSPWC). We have also assumed that Type II Aggregate Base will conform to Section 704.03.04 of the USSPWC. Type II Aggregate Base materials should be placed and compacted to 95 percent relative compaction (as evaluated by ASTM D 1557) in accordance with Section 302 of the USSPWC.

Ninyo & Moore recommends that Portland cement concrete pavement be utilized in trash dumpster and other heavy traffic areas. Our experience indicates that truck traffic and heavy traffic can significantly shorten the useful life of asphalt concrete sections. We recommend that, in dumpster approach and other heavy traffic areas, 600 pounds per square inch (psi) flexural strength Portland cement concrete, 7 inches thick, be placed over 6 inches of compacted Type II Aggregate Base over 12 inches of adequately placed and compacted structural fill. We also recommend that a qualified structural engineer be consulted for appropriate concrete reinforcement in truck traffic areas.

We recommend that mix designs be made for the asphalt concrete and Portland cement concrete by an engineering company specializing in this type of work. In addition, paving operations should be observed and tested by a qualified testing laboratory.

Adequate surface drainage should be provided to reduce ponding and infiltration of water into the pavement and subgrade materials. We suggest that the paved areas have a surface gradient of 1 percent or more. In addition, surface runoff from surrounding areas should be intercepted, collected, and not permitted to flow onto the pavement or infiltrate the base and subgrade. We recommend that perimeter swales, edge drains, curbs and gutters, or combination of these drainage devices, be constructed to reduce the adverse effects of surface water runoff.

### 8.7.2. Gowan Road

Based on information provided by City of North Las Vegas personnel, the two-way average daily traffic (ADT) along Gowan Road in the year 2005 is 7,000 vehicles per day (vpd). We have assumed that Gowan Road will be a two-lane facility in each direction with a 20-year design life (through the year 2027). In order to evaluate design Equivalent Single Axle Load (ESAL) values for Gowan Road, traffic distribution, ESAL factors, and growth rate provided by City of North Vegas personnel were used. Preliminary pavement section calculations are also provided in Appendix D.

To form a basis for design of flexible pavement for off-site half-street improvements along portions of Gowan Road adjacent to the subject site, we have assumed the following:

- Gowan Road has a right-of-way (ROW) width of approximately 80 feet and is considered a major collector.
- 80 percent reliability.
- 0.45 standard deviation.
- 4.2 initial serviceability.
- 2.5 terminal serviceability.
- An annual growth rate of 5 percent through the year 2027.
- Resilient Modulus ( $M_R$ ) of 8,100 psi for an R-value of 19 (based on laboratory test results).

Using these values, a structural number associated with the Gowan Road was calculated using design procedures in accordance with the American Association of State Highway and Transportation Officials method of designing flexible pavement (AASHTO, 1993). The following table presents the recommended structural pavement section placed over structural fill for off-site half-street improvements.



**Table 6 – Preliminary Pavement Sections for Gowan Road**

Location	Design ESAL	Pavement ( $a_{\text{asphalt}} = 0.35$ )	Base ( $a_{\text{base}} = 0.12$ )	Recompacted Subgrade	Structural Number Provided	Structural Number Needed
		Asphalt Thickness (Inches)	Type II Base Thickness (Inches)	Thickness (Inches)*		
Gowan Road	2,014,200	7.0	16.0	8.0	4.37	4.29
*Recompacted subgrade below pavement sections may include 6 inches of scarified native soil compacted to 90 percent relative compaction (as evaluated by ASTM D 1557).						

The pavement section for Gowan Road should be considered preliminary. The City of North Las Vegas will require that the pavement section be re-evaluated once the roadway is graded to expose native subgrade. Additional reevaluation tests will need to be performed and the pavement section recalculated.

If the assumed traffic or design ESAL values are not considered appropriate, this office should be notified. In providing the recommendations for pavement section, we have assumed that asphalt concrete will be mixed and placed in accordance with Section 401 of the referenced USSPWC. We have also assumed that Type II Aggregate Base will conform to Section 704.03.04 of the USSPWC. Type II Aggregate Base materials should be placed and compacted to 95 percent relative compaction (as evaluated by ASTM D 1557) in accordance with Section 302 of the USSPWC. Recompacted subgrade below Type II Aggregate Base should be compacted to 90 percent relative compaction (as evaluated by ASTM D 1557).

### **8.8. Concrete and Corrosion Considerations**

The corrosion potential of on-site soils to concrete was evaluated in the laboratory using representative samples obtained from the exploratory excavations. Laboratory testing was performed to assess the effects of sulfate content on concrete and buried metal. Results of these tests are presented in Appendix C. Recommendations regarding concrete to be utilized in construction of proposed improvements and for buried metal pipes are provided in the following sections.

**8.8.1. Concrete**

Chemical tests performed on selected samples of on-site soil indicated sulfate contents of 0.34 and 0.38 percent by weight. Based on the following table from the International Building Code (ICC, 2006), the tested on-site soils are considered to be severely deleterious to concrete.

**Table 7 – Requirements for Concrete Exposed to Sulfate-Containing Soil**

Sulfate Exposure	Water-Soluble Sulfate (SO <sub>4</sub> ) in Soil, Percent by Weight	Cement Type	Maximum Water-Cementitious Materials Ratio, by Weight, Normal-Weight Aggregate Concrete <sup>a</sup>	Minimum $f'_c$ , Normal Weight and Lightweight Aggregate Concrete in MPa
Negligible	0.00 - 0.10	--	--	--
Moderate <sup>b</sup>	0.10 - 0.20	II, IP(MS), IS (MS), P(MS), I(PM)(MS), I(SM)(MS)	0.50	4,000 psi
Severe	0.20 - 2.00	V	0.45	4,500 psi
Very severe	Over 2.00	V plus pozzolan <sup>c</sup>	0.45	4,500 psi

a A lower water-cementitious materials ratio or higher strength may be required for low permeability or for protection against corrosion of embedded items or freezing and thawing (Table 1904.2.2).  
b Seawater.  
c Pozzolan that has been determined by test or service record to improve sulfate resistance when used in concrete containing Type V cement.

We recommend that on-site concrete in contact with on-site soils, along with subsurface walls up to 12 inches above finished grade, contain Type V cement with a water-cement ratio of 0.45 by weight and a design compressive strength of 4,500 psi. In addition, it is recommended that reinforcing bars within placed within cast-in-place concrete, which is in contact with the soil, be covered by approximately 3 inches or more of concrete. Concrete should be placed with an approximately 4-inch slump and good densification procedures should be used during placement to reduce possible honeycombing. The slump should be tested at the site by the geotechnical consultant. Structural concrete should be placed in accordance with the referenced American Concrete Institute (ACI, 2005) and project specifications. We also suggest that concrete masonry unit (CMU) blocks, if utilized for the project, be constructed with Type V cement.



### **8.8.2. Buried Metal Pipes**

We recommend that corrosion reduction methods be implemented for this project for buried metal pipes. These corrosion reduction methods may include utilization of protective coatings, pipe sleeving, and/or appropriate cathodic protection, as recommended by a qualified corrosion engineer. Where permitted by local building codes, the use of PVC pipes should also be considered.

### **8.9. Moisture Infiltration Reduction and Surface Drainage**

Infiltration of water into subsurface soils can lead to soil movement and associated distress, and chemically and physically related deterioration of concrete structures. To reduce the potential for infiltration of moisture into subsurface soils at the site, we recommend the following:

- Positive drainage should be established and maintained away from proposed buildings. Positive drainage may be established by providing a surface gradient away from buildings of 5 percent for a distance of 10 feet away from the structure's perimeter.
- Adequate surface drainage should be provided to channel surface water away from on-site structures and to a suitable outlet such as a drainage channel or storm drain. Adequate surface drainage may be enhanced by utilization of graded swales, area drains, and other drainage devices. Surface runoff should not be allowed to pond near structures.
- Roof drain downspouts should be tightlined to an appropriate outlet such as a storm drain or the street. If tightlining of the downspouts is not practicable, they should discharge 5 feet away from the buildings or onto flatwork that slopes away from the structures. Downspouts should not be allowed to discharge onto the ground surface adjacent to the building foundations.
- Ninyo & Moore recommends that low-water use (desert-type) landscaping be utilized on site, particularly within 5 feet of buildings and exterior site improvements, including areas of concrete flatwork and masonry block walls.
- Utility line trenches within the building pads, including 5 feet beyond the building edges, should be backfilled with on-site derived soil or an equivalent in gradation import. To reduce the potential for migration of subsurface water beneath the buildings, granular clean soils should not be used as trench backfill.

## **9. OBSERVATION AND TESTING**

The geotechnical consultant should perform appropriate observation and testing services during grading and construction operations. These services should include evaluation of subgrade conditions where soil removals are performed and observation and testing services during placement of concrete, mortar, grout, asphalt concrete, and steel reinforcement. The geotechnical consultant should evaluate the depth of removal of soft, loose, or otherwise unsuitable soils, as well as observe and test the placement and compaction of structural fill and backfill soils.

The recommendations provided in this report are based on the assumption that Ninyo & Moore will provide geotechnical observation and testing services during construction. In the event that it is decided not to utilize the services of Ninyo & Moore during construction, we request that the selected consultant provide the client with a letter (with a copy to Ninyo & Moore) indicating that they fully understand Ninyo & Moore's recommendations, and that they are in full agreement with the design parameters and recommendations contained in this report.

## **10. PLAN REVIEW**

The recommendations presented in this report are based on information for the proposed project as provided by the client, and on the findings of our geotechnical evaluation. When completed, project plans and specifications should be reviewed by the geotechnical consultant prior to submitting the plans and specifications for bid. Additional field exploration and laboratory testing may be needed upon review of the final project design plans.

## **11. PRE-CONSTRUCTION MEETING**

We recommend that a pre-construction meeting be held. The owner or the owner's representative, the architect, the civil engineer, the geotechnical consultant, and the contractor should be in attendance to discuss the plans and the project.



## 12. LIMITATIONS

The field evaluation, laboratory testing, and geotechnical analyses presented in this geotechnical report have been conducted in general accordance with current practice and the standard of care exercised by geotechnical consultants performing similar tasks in the project area. No warranty, expressed or implied, is made regarding the conclusions, recommendations, and opinions presented in this report. There is no evaluation detailed enough to reveal every subsurface condition. Variations may exist and conditions not observed or described in this report may be encountered during construction. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface evaluation will be performed upon request. Please also note that our evaluation was limited to assessment of the geotechnical aspects of the project, and did not include evaluation of structural issues, environmental concerns, or the presence of hazardous materials.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document.

This report is intended for design purposes only. It does not provide sufficient data to prepare an accurate bid by contractors. It is suggested that the bidders and their geotechnical consultant perform an independent evaluation of the subsurface conditions in the project areas. The independent evaluations may include, but not be limited to, review of other geotechnical reports prepared for the adjacent areas, site reconnaissance, and additional exploration and laboratory testing.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. If geotechnical conditions different from those described in this report are encountered, our office should be notified and additional recommendations, if warranted, will be provided upon request. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur

due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.



### 13. SELECTED REFERENCES

- American Association of State Highway and Transportation Officials (AASHTO), 1993, AASHTO Guide for Design of Pavement Structures: Fourth Edition, Volume 1 and Volume 2.
- American Concrete Institute (ACI), 2005, ACI Manual of Concrete Practice.
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- Clark County, Boulder City, City of Las Vegas, City of Mesquite, City of North Las Vegas, City of Henderson, and Pahrump Regional Planning District, 2006, Southern Nevada Amendments to the 2006 International Building Code: dated October 1
- Clark County, 2001, Uniform Standard Drawings for Public Works Construction, Off-Site Improvements (USDPMC), Clark County, Nevada: Volume I and Volume II, Third Edition, revisions through December.
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- Nevada Bureau of Mines and Geology, 1978, Geologic Map of Nevada: Scale 1:500,000.
- Ninyo & Moore proprietary in-house data.
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Portland Cement Association (PCA), 1981, Portland Cement Concrete Pavement Design for Light, Medium, and Heavy Traffic: Third Printing.

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United States Geological Survey (USGS), 2007b, Quaternary Faults and Fold Database of the United States: <http://earthquakes.usgs.gov/qfaults/>.

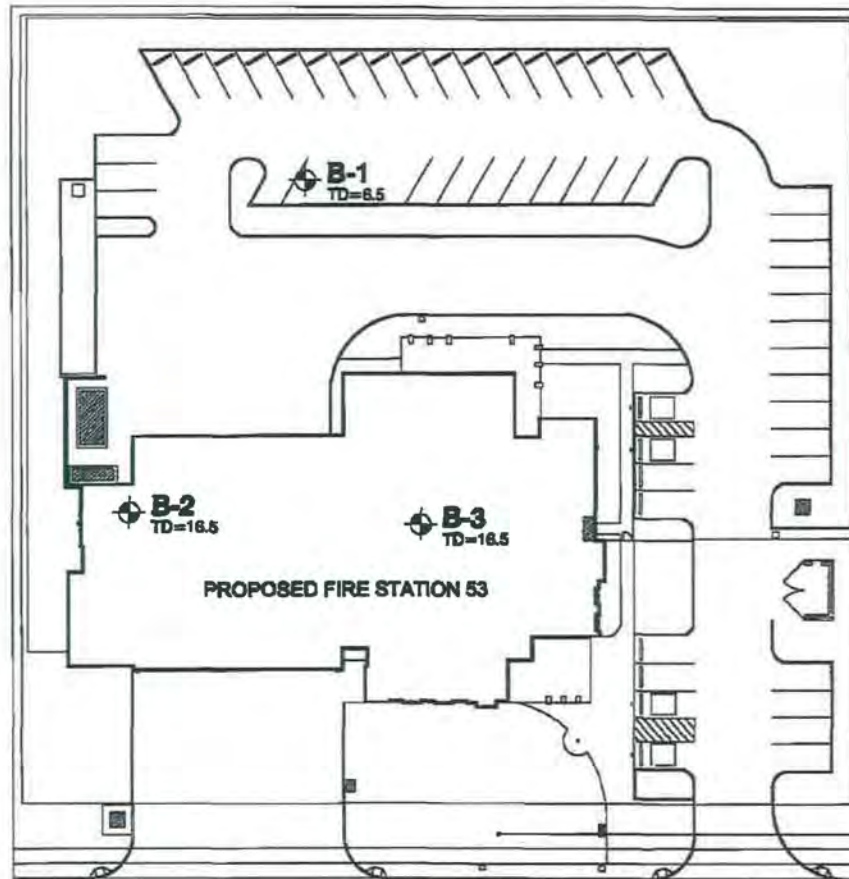
AERIAL PHOTOGRAPHS				
Source	Date	Flight	Numbers	Scale
USGS	5/18/65	GS-VBFN	1-84 through 1-86	1:22,000







SIMMONS STREET



GOWAN ROAD

**LEGEND**

- ⊕ **B-4** Approximate location of exploratory boring.  
 TD=11.5 TD indicates total depth of exploratory boring, in feet.

REFERENCE: Delmar/Parich/Sabatini, 2007, Site Plan, CHLV Fire Station 53, W. Gowan Road Near Simmons Street, North Las Vegas, Nevada; dated April 15.

NOTE: Dimensions, directions, and locations are approximate.



SCALE



**Ninyo & Moore**

**EXPLORATORY BORING LOCATIONS**

FIGURE

PROJECT NO.

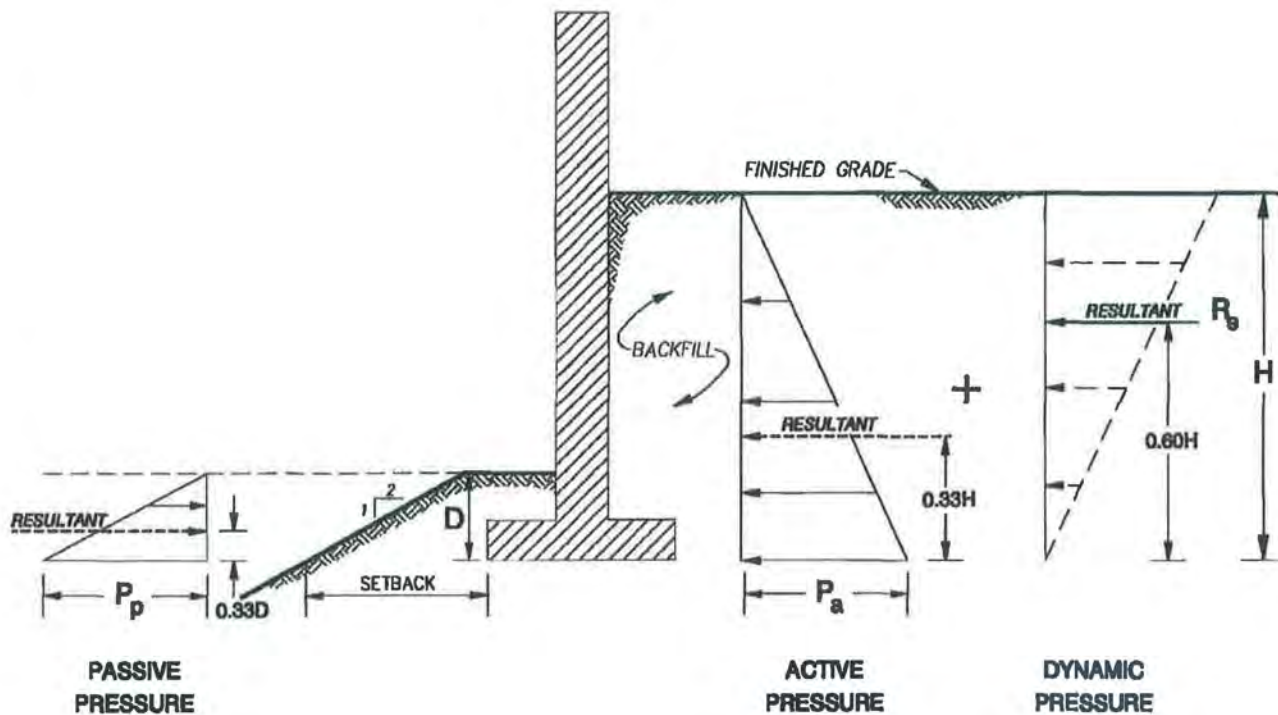
DATE

302268001

8/07

PROPOSED FIRE STATION 53  
 WEST GOWAN ROAD NEAR SIMMONS STREET  
 NORTH LAS VEGAS, NEVADA

**2**



**NOTES:**

1. ASSUMES NO HYDROSTATIC PRESSURE BUILD-UP BEHIND THE RETAINING WALL
2. ASSUMES LEVEL, GRANULAR BACKFILL MATERIALS
3. DRAINS AS RECOMMENDED IN THE RETAINING WALL DRAINAGE DETAIL SHOULD BE INSTALLED BEHIND THE RETAINING WALL
4. DYNAMIC LATERAL EARTH PRESSURE RESULTANT IS BASED ON THE REFERENCED SOUTHERN NEVADA AMENDMENTS TO THE 2008 IBC (CLARK COUNTY ET AL., 2008)
5. SURCHARGE PRESSURES CAUSED BY VEHICLES OR NEARBY STRUCTURES ARE NOT INCLUDED
6. H AND D ARE IN FEET
7. SETBACK SHOULD BE IN ACCORDANCE WITH SECTION 1808.3 OF THE 2008 IBC

**RECOMMENDED GEOTECHNICAL DESIGN PARAMETERS**

Lateral Earth Pressure	Equivalent Fluid Pressure (pcf/ft)
$P_a$	42H
$P_p$	280D
Resultant	Force Per Unit Width of Wall (lb/ft)
$R_d$	$9H^2$

NOT TO SCALE

**Ninyo & Moore**

PROJECT NO.

302288001

DATE

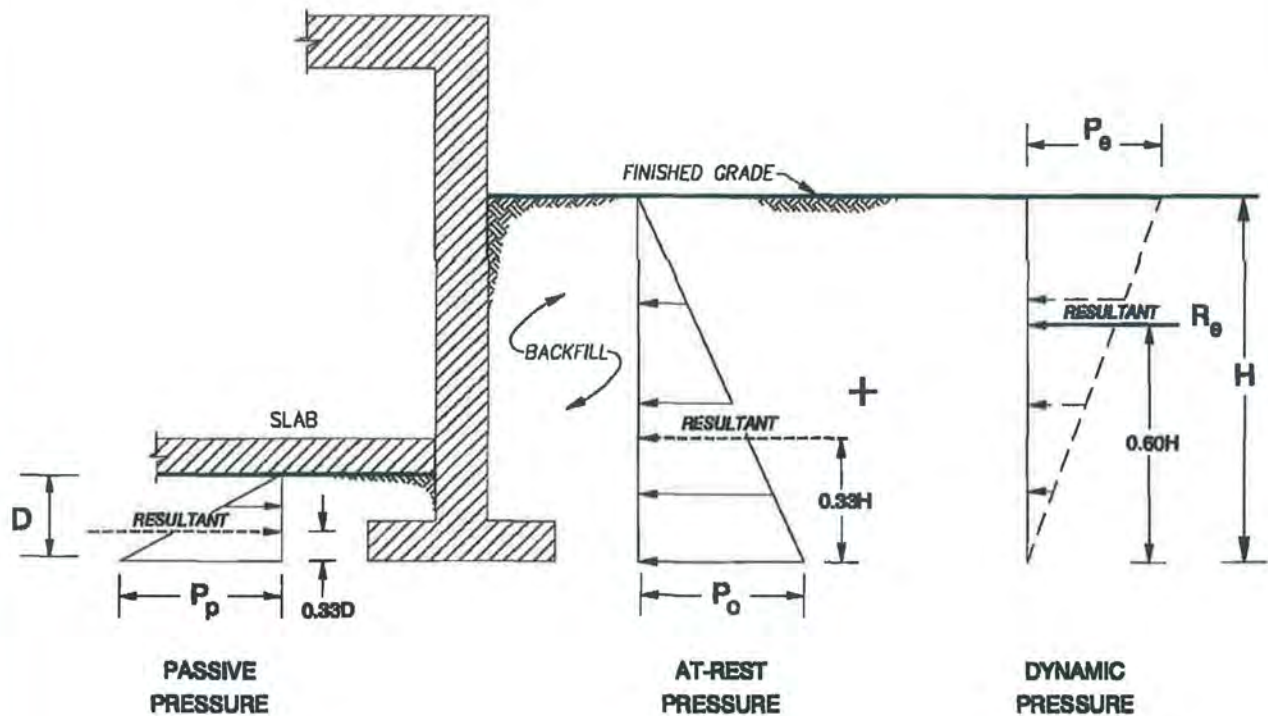
8/07

**LATERAL EARTH PRESSURES  
FOR YIELDING RETAINING WALLS**

PROPOSED FIRE STATION 63  
WEST GOWAN ROAD NEAR SIMMONS STREET  
NORTH LAS VEGAS, NEVADA

FIGURE

**3**



**NOTES:**

1. ASSUMES NO HYDROSTATIC PRESSURE BUILD-UP BEHIND THE RETAINING WALL
2. ASSUMES LEVEL, GRANULAR BACKFILL MATERIALS
3. DRAINS AS RECOMMENDED IN THE RETAINING WALL DRAINAGE DETAIL SHOULD BE INSTALLED BEHIND THE RETAINING WALL
4. DYNAMIC LATERAL EARTH PRESSURE RESULTANT IS BASED ON THE REFERENCED SOUTHERN NEVADA AMENDMENTS TO THE 2006 IBC (CLARK COUNTY ET AL., 2006)
5. SURCHARGE PRESSURES CAUSED BY VEHICLES OR NEARBY STRUCTURES ARE NOT INCLUDED
6. H AND D ARE IN FEET

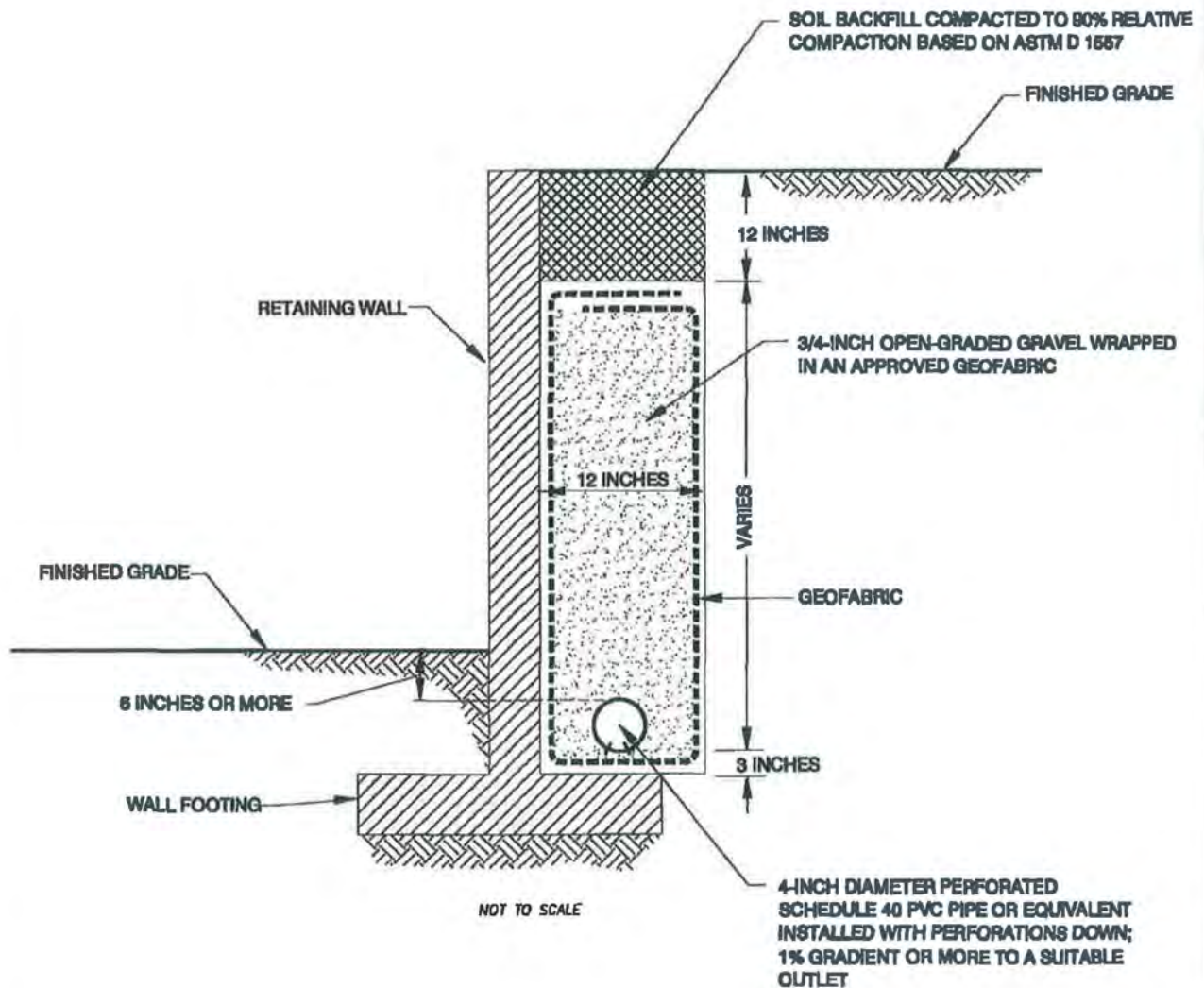
**RECOMMENDED GEOTECHNICAL DESIGN PARAMETERS**

Lateral Earth Pressure	Equivalent Fluid Pressure (pcf/ft)
$P_o$	$62H$
$P_p$	$280D$
Resultant	Force Per Unit Width of Wall (lb/ft)
$R_o$	$23H^2$

NOT TO SCALE

<b>Ningo &amp; Moore</b>		<b>LATERAL EARTH PRESSURES FOR RESTRAINED RETAINING WALLS</b>	FIGURE
PROJECT NO.	DATE	PROPOSED FIRE STATION 53 WEST GOWAN ROAD NEAR SIMMONS STREET NORTH LAS VEGAS, NEVADA	<b>4</b>
302288001	8/07		





NOTES: AS AN ALTERNATIVE, AN APPROVED GEOCOMPOSITE DRAIN SYSTEM MAY BE USED.

AS AN ALTERNATIVE TO USE OF 4" DIAMETER PVC BACKDRAINAGE PIPES, WEEP HOLES CAN BE CORED THROUGH THE WALL AND LINED WITH PVC PIPE. WEEP HOLES SHOULD BE 3" DIAMETER AND PLACED APPROXIMATELY 3' ABOVE THE LOWEST ADJACENT FINISHED GRADE AT APPROXIMATELY 10' ON-CENTER.

<b>Ninyo &amp; Moore</b>		<b>RETAINING WALL DRAINAGE DETAIL</b>	FIGURE
PROJECT NO.	DATE	PROPOSED FIRE STATION 63 WEST GOWAN ROAD NEAR SIMMONS STREET NORTH LAS VEGAS, NEVADA	<b>5</b>
302288001	8/07		



**APPENDIX A**  
**EXPLORATORY BORING LOGS**

**Field Procedure for the Collection of Disturbed Samples**

Bulk samples of representative earth materials were obtained from the exploratory excavations. The samples were bagged and transported to the laboratory for testing.

**Field Procedure for the Collection of Relatively Undisturbed Samples**

Relatively undisturbed soil samples were obtained in the field using a modified split-barrel drive sampler. The sampler, with an external diameter of 3.0 inches, was lined with 1-inch long, thin brass rings with inside diameters of approximately 2.4 inches. The sample barrel was driven into the ground with the weight of a hammer or the kelly bar of the drill rig in general accordance with ASTM D 3550-01. The driving weight was permitted to fall freely. The approximate length of the fall, the weight of the hammer or bar, and the number of blows per foot of driving are presented on the boring logs as an index to the relative resistance of the materials sampled. The samples were removed from the sample barrel in the brass rings, sealed, and transported to the laboratory for testing.

**PET.APP.000949**




U.S.C.S. METHOD OF SOIL CLASSIFICATION			
MAJOR DIVISIONS		SYMBOL	TYPICAL NAMES
COARSE-GRAINED SOILS (More than 1/2 of soil >No. 200 sieve size)	GRAVELS (More than 1/2 of coarse fraction > No. 4 sieve size)	GW	Well graded gravels or gravel-sand mixtures little or no fines
		GP	Poorly graded gravels or gravel-sand mixtures, little or no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	SANDS (More than 1/2 of coarse fraction <No. 4 sieve size)	SW	Well graded sands or gravelly sands, little or no fines
		SP	Poorly graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS (More than 1/2 of soil <No. 200 sieve size)	SILTS & CLAYS Liquid Limit <50	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silty clays of low plasticity
	SILTS & CLAYS Liquid Limit >50	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silty clays, organic silts
HIGHLY ORGANIC SOILS		Pt	Peat and other highly organic soils

GRAIN SIZE CHART		
CLASSIFICATION	RANGE OF GRAIN SIZES	
	U.S. Standard Sieve Size	Grain Size in Millimeters
BOULDERS	Above 12"	Above 305
COBBLES	12" to 3"	305 to 76.2
GRAVEL	3" to No. 4	76.2 to 4.76
	3" to 3/4"	76.2 to 19.1
	3/4" to No. 4	19.1 to 4.76
SAND	No. 4 to No. 200	4.76 to 0.074
	No. 4 to No. 10	4.76 to 2.00
	No. 10 to No. 40	2.00 to 0.420
	No. 40 to No. 200	0.420 to 0.074
SILT & CLAY	Below No. 200	Below 0.074

Hardness of Caliche*	
Descriptive Term	Characteristics
Moderately Hard	Can be scratched with a knife with light to moderate pressure; breaks with moderate hammer blow.
Hard	Can be scratched with a knife with difficulty; can be broken with heavy hammer blow.
Very Hard	Cannot be scratched with a knife; can only be broken with repeated heavy hammer blows.
* Rock-like cemented soil	

<b>Ninyo &amp; Moore</b>	<b>SOIL CLASSIFICATION</b>
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DEPTH (feet)	SAMPLES Bulk Driven	BLOWS	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/06/07</u> BORING NO. <u>B-1</u>		
							GROUND ELEVATION <u>Not measured</u> SHEET <u>1</u> OF <u>1</u>		
							METHOD OF DRILLING <u>Mobile B-61 HDX hollow-stem auger drill rig</u>		
							DRIVE WEIGHT <u>140 lbs. (auto trip hammer)</u> DROP <u>30"</u>		
							SAMPLED BY <u>DJF</u> LOGGED BY <u>DJF</u> REVIEWED BY <u>EDE</u>		
							DESCRIPTION/INTERPRETATION		
0						SC	<b>NATIVE SOIL:</b> Light tannish gray to light brown, damp, medium dense, clayey SAND; trace rootlets; few gravel.		
5		9/6" 9/6" 8/6"	6.9	92.4		CL	Light gray to brown, damp, very stiff, sandy lean CLAY; slightly gypsiferous; slightly cemented.		
							Total depth = 6.5 feet. Groundwater not encountered during drilling. Backfilled on 4/06/07.		
							<b>NOTE:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.		
10									
15									
20									




BORING LOG		
PROPOSED FIRE STATION 53, WEST GOWAN ROAD NEAR SIMMONS STREET NORTH LAS VEGAS, NEVADA		
PROJECT NO.	DATE	FIGURE
302288001	8/07	A-1

PET.APP.000991



DEPTH (feet)	SAMPLES Bulk Driven	BLOWS	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/06/07</u> BORING NO. <u>B-2</u>		
							GROUND ELEVATION <u>Not measured</u> SHEET <u>1</u> OF <u>1</u>		
METHOD OF DRILLING <u>Mobile B-61 HDX hollow-stem auger drill rig</u>							DRIVE WEIGHT <u>140 lbs. (auto trip hammer)</u> DROP <u>30"</u>		
SAMPLED BY <u>DJF</u> LOGGED BY <u>DJF</u> REVIEWED BY <u>EDE</u>							DESCRIPTION/INTERPRETATION		
0						SC	NATIVE SOIL: Light brown, damp, medium dense, clayey SAND.		
		4/6" 5/6" 10/6"	44.3	63.8		CH	Brown, moist, very stiff, sandy fat CLAY; highly gypsiferous.		
5		2/6" 3/6" 10/6"	17.8	72.8		SM	Brown, damp, loose, silty SAND; trace clay; few gravel.		
10		2/6" 5/6" 9/6"	33.2	67.0		CL	Light brown to reddish brown, moist, very stiff, sandy lean CLAY; trace rootlets; moderately porous.		
15		4/6" 15/6" 9/6"	5.4	108.7			Light brown, damp; no rootlets.		
Total depth = 16.5 feet. Groundwater not encountered during drilling. Backfilled on 4/06/07.									
NOTE: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.									
20									



**BORING LOG**

PROPOSED FIRE STATION 53, WEST GOWAN ROAD NEAR SIMMONS STREET  
NORTH LAS VEGAS, NEVADA

PROJECT NO. 302288001	DATE 8/07	FIGURE A-2
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DEPTH (feet)	SAMPLES		BLOWS	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/06/07</u> BORING NO. <u>B-3</u> GROUND ELEVATION <u>Not measured</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>Mobile B-61 HDX hollow-stem auger drill rig</u> DRIVE WEIGHT <u>140 lbs. (auto trip hammer)</u> DROP <u>30"</u> SAMPLED BY <u>DJF</u> LOGGED BY <u>DJF</u> REVIEWED BY <u>EDE</u> DESCRIPTION/INTERPRETATION		
	Bulk	Driven								
0							SM	<b>NATIVE SOIL:</b> Light brown, damp, medium dense, silty SAND; trace clay; trace gravel.		
							CL	Light brown, moist, very stiff, sandy lean CLAY with gravel.		
5			10/6" 9/6" 10/6"	12.5	93.6		SC	Light brown, damp, medium dense, clayey SAND; trace gravel. Moderately gypsiferous; slightly cemented.		
10			4/6" 6/6" 2 1/6"	12.8	99.4		CL	Light gray to reddish brown, damp, very stiff, sandy lean CLAY; slightly cemented; slightly porous.		
15			8/6" 9/6" 10/6"	19.1	84.3			Total depth = 16.5 feet. Groundwater not encountered during drilling. Backfilled on 4/06/07.		
20								NOTE: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.		

**Ningo & Moore**

**BORING LOG**

PROPOSED FIRE STATION 53, WEST GOWAN ROAD NEAR SIMMONS STREET  
NORTH LAS VEGAS, NEVADA


PROJECT NO.  
302288001

DATE  
8/07

FIGURE  
A-3

PET.APP.000953

DEPTH (feet)	BULK SAMPLES Driven	BLOWS	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/06/07</u> BORING NO. <u>B-4</u>		
							GROUND ELEVATION <u>Not measured</u>	SHEET <u>1</u> OF <u>1</u>	
							METHOD OF DRILLING <u>Mobile B-61 HDX hollow-stem auger drill rig</u>		
							DRIVE WEIGHT <u>140 lbs. (auto trip hammer)</u> DROP <u>30"</u>		
							SAMPLED BY <u>DJF</u> LOGGED BY <u>DJF</u> REVIEWED BY <u>EDE</u>		
							<b>DESCRIPTION/INTERPRETATION</b>		
0						GM	FILL:		
						SC	Grayish brown, damp, medium dense, silty GRAVEL with sand. Light brown, damp, medium dense, clayey SAND with gravel.		
						SC	NATIVE SOIL: Brown, damp to moist, very loose, clayey SAND; little gravel.		
5		3/6" 2/6" 2/6"	24.4	72.5			Moist; slightly gypsiferous.		
10		4/6" 3/6" 6/6"	46.5	61.7		CL	Brown, moist, stiff, sandy lean CLAY; moderately porous.		
							Total depth = 11.5 feet. Groundwater not encountered during drilling. Backfilled on 4/16/07.		
							NOTE: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.		
15									
20									



BORING LOG		
PROPOSED FIRE STATION 53, WEST GOWAN ROAD NEAR SIMMONS STREET NORTH LAS VEGAS, NEVADA		
PROJECT NO. 302288001	DATE 5/07	FIGURE A-4



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**APPENDIX B**  
**LABORATORY TESTING**

**Classification**

Soils were visually and texturally classified in accordance with the Unified Soil Classification System (USCS) in general accordance with ASTM D 2488-00. Soil classifications are indicated on the logs of the exploratory excavations in Appendix A.

**In-Place Moisture and Density**

The moisture content and dry density of relatively undisturbed samples obtained from the exploratory excavations were evaluated in general accordance with ASTM D 2937-04. The test results are presented on the logs of the exploratory excavations in Appendix A.

**Gradation Analysis**

Gradation analysis tests were performed on selected representative soil samples in general accordance with ASTM D 422-63 (02). The grain-size distribution curves are shown on Figure B-1 and Figure B-2. These test results were utilized in evaluating the soil classifications in accordance with the USCS.

**Atterberg Limits**

Tests were performed on selected representative soil samples to evaluate the liquid limit, plastic limit, and plasticity index in general accordance with ASTM D 4318-05. These test results were utilized to evaluate the soil classification in accordance with the USCS. The test results and classifications are shown on Figure B-3.

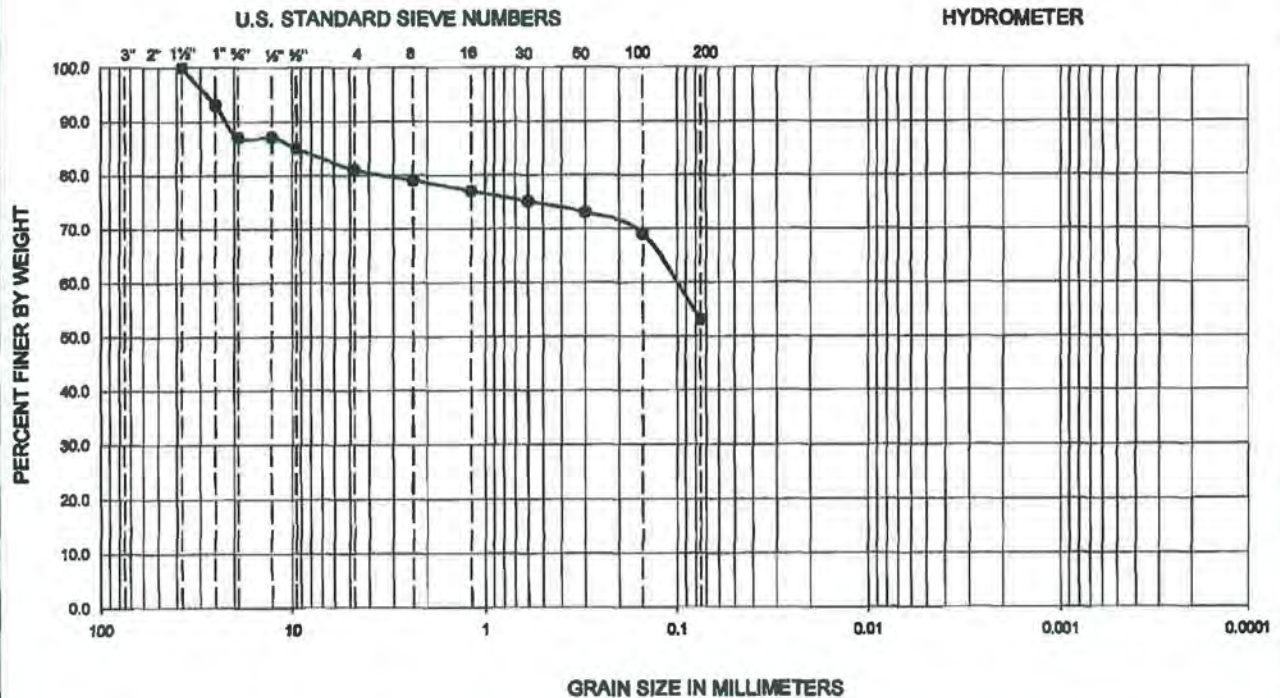
**Consolidation**

Consolidation tests were performed on selected relatively undisturbed soil samples in general accordance with ASTM D 2435-04. The samples were inundated during testing to represent adverse field conditions. The percent of consolidation for each load cycle was recorded as a ratio of the amount of vertical compression to the original height of the sample. The consolidation test results are summarized graphically on Figure B-4 and Figure B-5 and the expansion/collapse potential results are summarized on Figure B-6.

**R-Value**

The resistance value, or R-value, for site soils was evaluated in general accordance with ASTM D 2844-01. The sample was prepared and evaluated for exudation pressure and expansion pressure. The equilibrium R-value is reported as the lesser, or more conservative, of the two calculated results. The test result is shown on Figure B-7.

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	SILT	CLAY



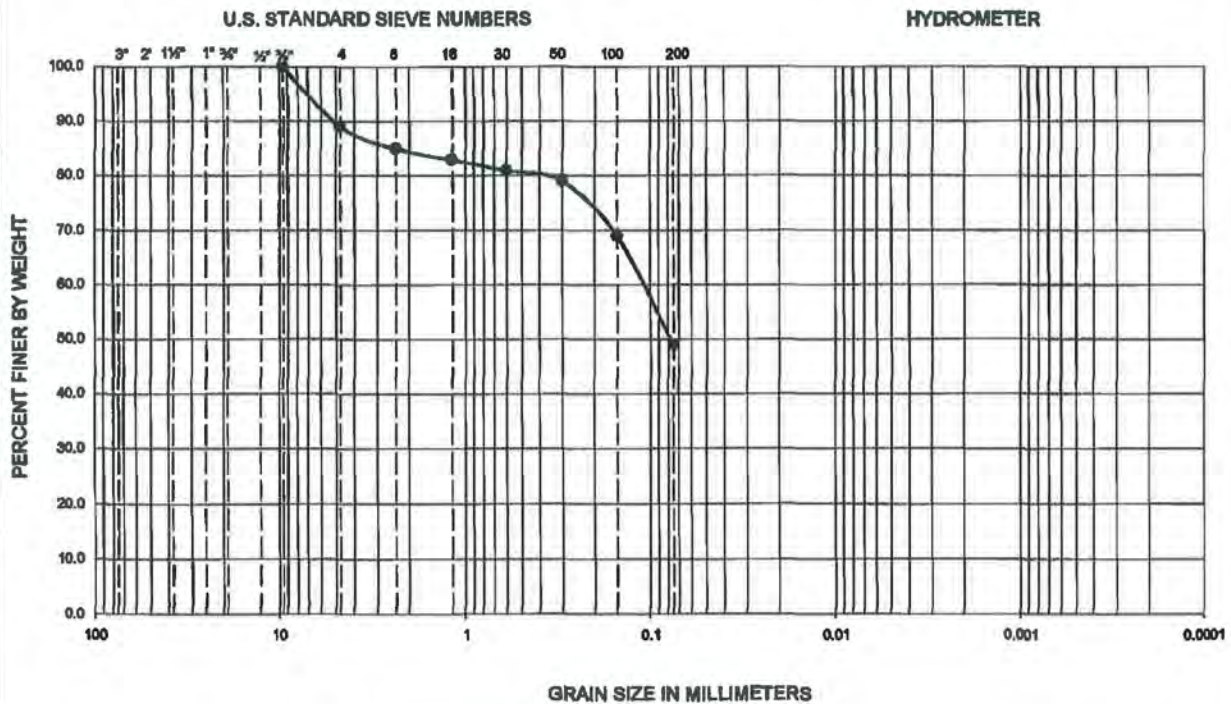
Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D <sub>10</sub>	D <sub>30</sub>	D <sub>60</sub>	C <sub>u</sub>	C <sub>c</sub>	Passing No. 200 (%)	U.S.C.S
●	B-3	2.0-3.0	41	16	25	--	--	--	--	--	53	CL

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422-63 (02)

<b>Ningo &amp; Moore</b>		<b>GRADATION TEST RESULTS</b>	<b>FIGURE</b>  <b>B-1</b>
<b>PROJECT NO.</b>	<b>DATE</b>	<b>PROPOSED FIRE STATION 63</b> <b>WEST GOWAN ROAD NEAR SIMMONS STREET</b> <b>NORTH LAS VEGAS, NEVADA</b>	
302288001	8/07		

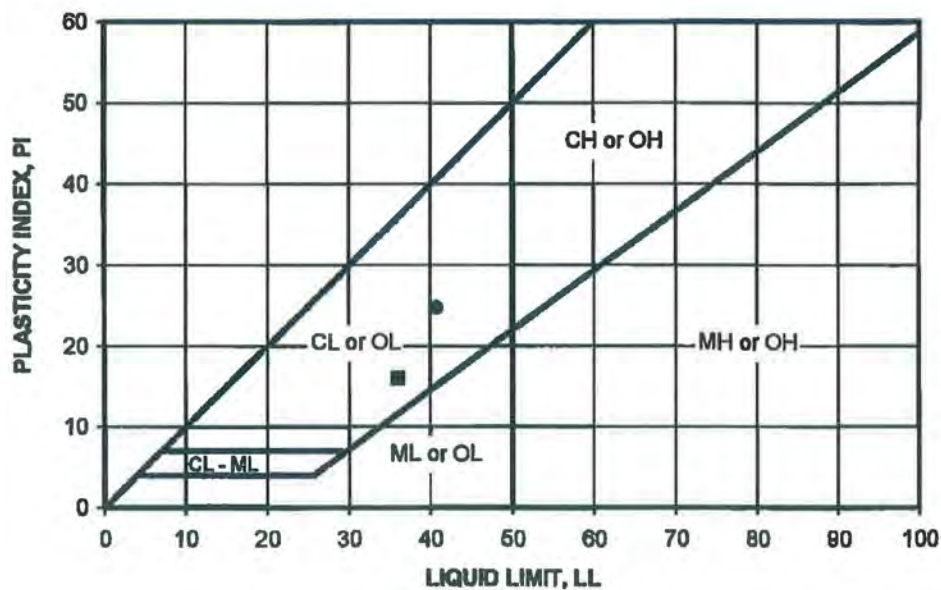


GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	SILT	CLAY



SYMBOL	LOCATION	DEPTH (FT)	LIQUID LIMIT, LL	PLASTIC LIMIT, PL	PLASTICITY INDEX, PI	USCS CLASSIFICATION (Fraction Finer Than No. 40 Sieve)	USCS (Entire Sample)
●	B-3	2.0-3.0	41	16	25	CL	CL
■	B-4	2.0-5.0	38	20	18	CL	SC

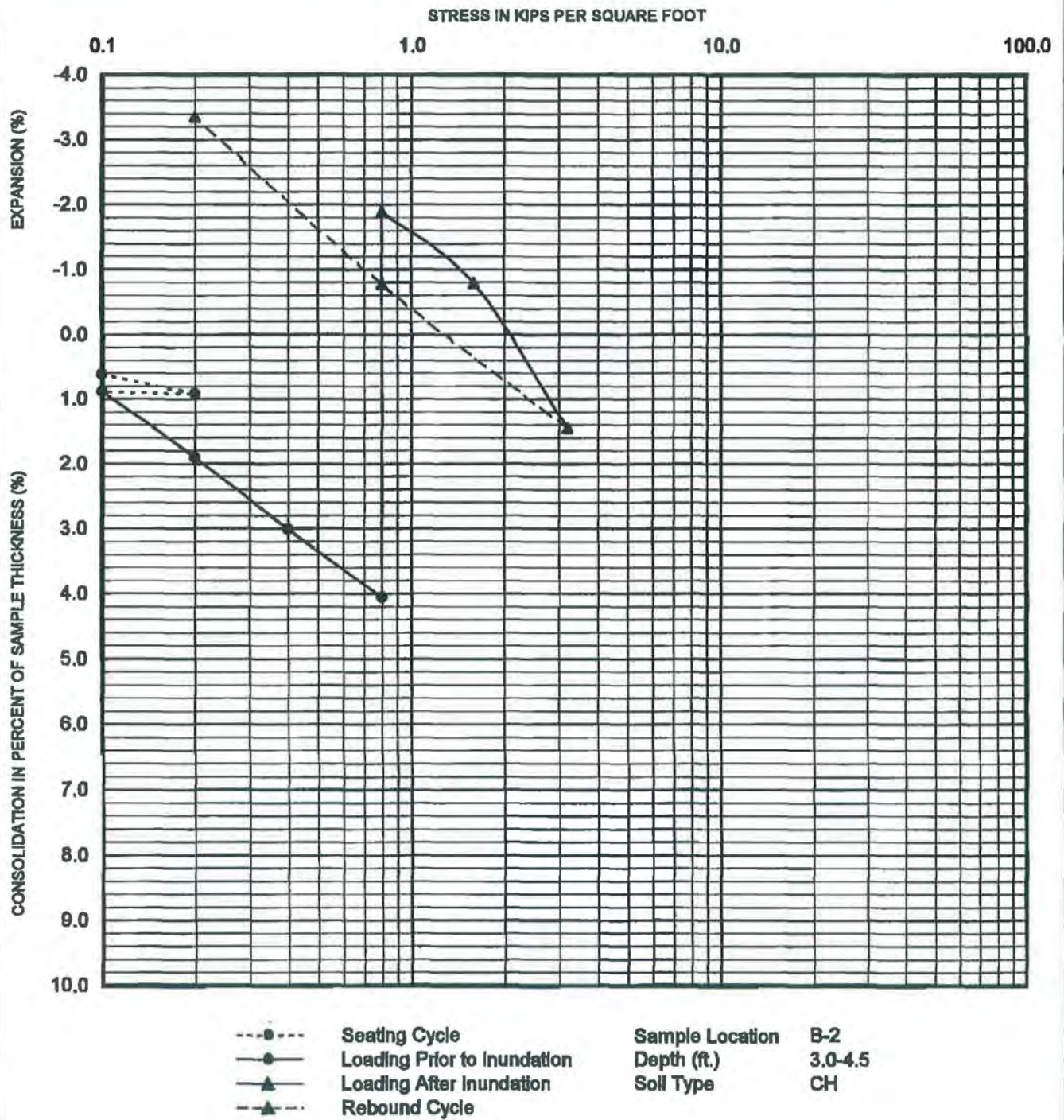
NP - Indicates Non-Plastic



PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 4318-05

<b>Ninyo &amp; Moore</b>		<b>ATTERBERG LIMITS TEST RESULTS</b>		<b>FIGURE</b>  <b>B-3</b>
PROJECT NO.	DATE	PROPOSED FIRE STATION 53 WEST GOWAN ROAD NEAR SIMMONS STREET NORTH LAS VEGAS, NEVADA		
302288001	8/07			





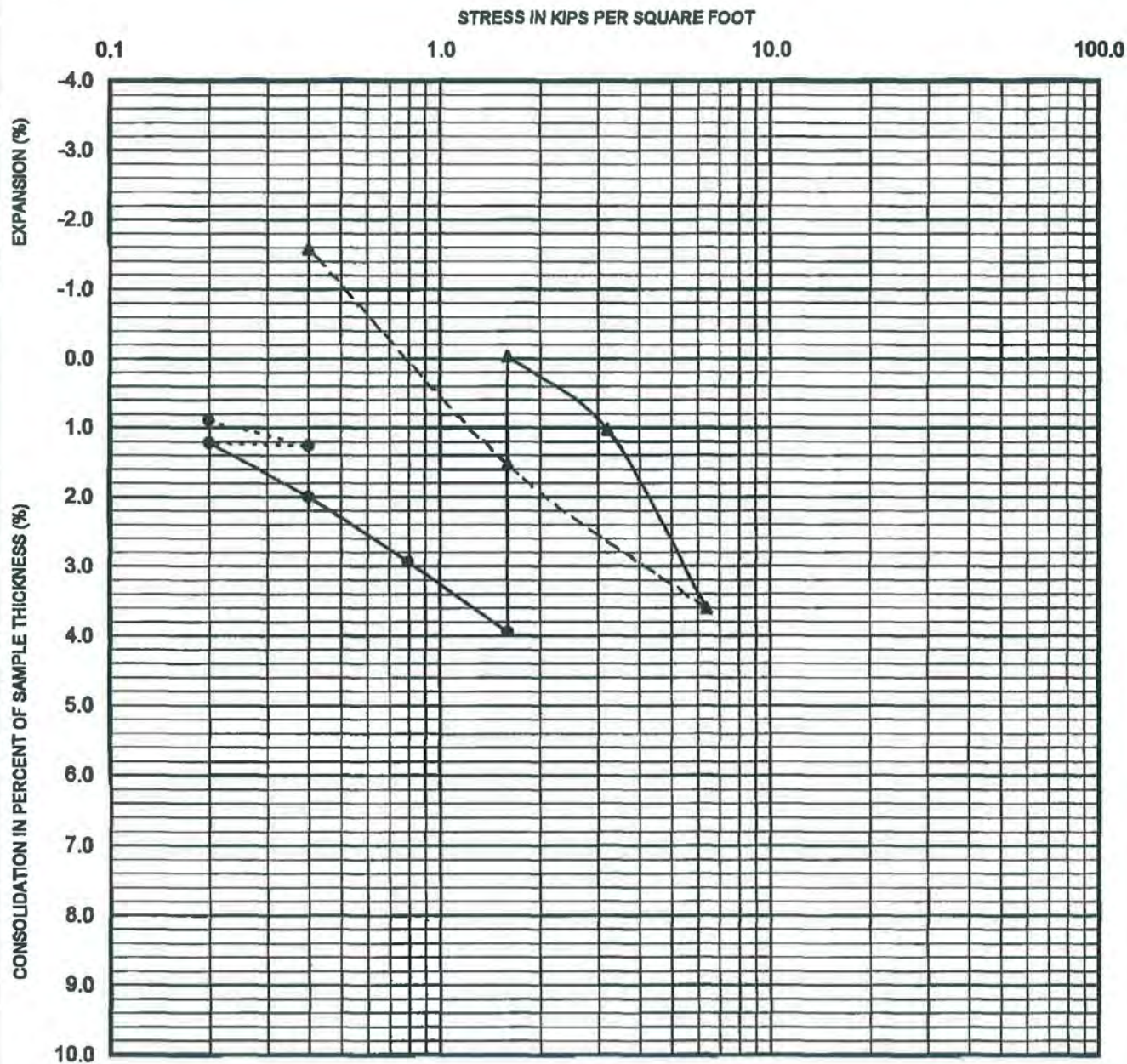
PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 2435-04

		CONSOLIDATION TEST RESULTS	FIGURE
PROJECT NO.	DATE	PROPOSED FIRE STATION 63 WEST GOWAN ROAD NEAR SIMMONS STREET NORTH LAS VEGAS, NEVADA	<b>B-4</b>
302288001	8/07		

302288001 CN B-2@3.0.xls

PET.APP.000959





- Seating Cycle
- Loading Prior to Inundation
- ▲— Loading After Inundation
- ▲--- Rebound Cycle

Sample Location B-3  
 Depth (ft.) 10.0-11.5  
 Soil Type CL

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 2435-04

		CONSOLIDATION TEST RESULTS	FIGURE
PROJECT NO.	DATE	PROPOSED FIRE STATION 53 WEST GOWAN ROAD NEAR SIMMONS STREET NORTH LAS VEGAS, NEVADA	<b>B-5</b>
302288001	8/07		

302288001 CN B-3@10.0.xls

PET.APP.000960



SAMPLE LOCATION	DEPTH (FT)	IN-PLACE MOISTURE CONTENT (%)	IN-PLACE DRY DENSITY (PCF)	FINAL MOISTURE CONTENT (%)	SURCHARGE (PSF)	EXPANSION POTENTIAL (%)	COLLAPSE POTENTIAL (%)
B-2	3.0-4.5	42.3	64.5	61.8	800	5.9	—
B-3	10.0-11.5	29.3	83.1	39.1	1600	4.0	—

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 2435-04

<b><i>Ninyo &amp; Moore</i></b>		<b>EXPANSION/COLLAPSE POTENTIAL TEST RESULTS</b>	<b>FIGURE  B-6</b>
PROJECT NO.	DATE	PROPOSED FIRE STATION 53 WEST GOWAN ROAD NEAR SIMMONS STREET NORTH LAS VEGAS, NEVADA	
302268001	8/07		

SAMPLE LOCATION	SAMPLE DEPTH (FT)	SOIL TYPE	R-VALUE
B-4	2.0-5.0	SC	19

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 2844-01

<b>Ninyo &amp; Moore</b>		<b>R-VALUE TEST RESULTS</b>	<b>FIGURE B-7</b>
<b>PROJECT</b>	<b>DATE</b>	<b>PROPOSED FIRE STATION 53 WEST GOWAN ROAD NEAR SIMMONS STREET NORTH LAS VEGAS, NEVADA</b>	
302288001	8/07		

**APPENDIX C**  
**CHEMICAL TEST RESULTS**

The results of chemical tests performed are provided in this appendix.



## LABORATORY REPORT

**DATE:** April 23, 2007

**REPORT NUMBER:** 07-1159

**CLIENT:** Ninyo & Moore  
6700 Paradise Road, Suite E  
Las Vegas, NV 89119

**PAGE:** 1 of 1

**CLIENT PROJECT:** 302288001

**CLIENT PO #:**

**ANALYST:** SW

**Sampled By:** Client  
**Date Sampled:** --  
**Time Sampled:** --

**Date Received:** 04/20/07  
**Time Received:** 1655

**Sample ID:** B-1 @ 1.0-4.0


Analysis	Result	Unit	Method
Sodium	0.01	%	ASTM D2791
Sulfate	0.34	%	SM 4500 E
Sodium Sulfate	0.04	%	Calculation
Total Salts (Solubility)	0.79	%	EPA 160.1

**Sample ID:** B-3 @ 2.0-3.0

Analysis	Result	Unit	Method
Sodium	0.13	%	ASTM D2791
Sulfate	0.38	%	SM 4500 E
Sodium Sulfate	0.39	%	Calculation
Total Salts (Solubility)	0.88	%	EPA 160.1

**NOTES:** The results for each constituent denote the percentage (%) for that particular element which is soluble in a 1:5 (soil to water) extraction ratio and corrected for dilution. To calculate from a % to a concentration, multiply the % by 10,000 to obtain ppm. This conversion is only a rough number due to atomic weights.

**REVIEWED BY:**

  
Ronald W. Winter  
Laboratory Director

5070 South Arville Street, Suite 6 Las Vegas, NV 89118  
Tel: 702-873-4478 Fax: 702-873-7967 [www.ssalabs.com](http://www.ssalabs.com)

PET.APP.000964



Proposed Fire Station 53

August 29, 2007  
Project No. 302288001

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**APPENDIX D**  
**FLEXIBLE PAVEMENT SECTION CALCULATIONS**

## TRAFFIC CALCULATIONS

**Ninyo & Moore**

Project Name: Proposed Fire Station 63

Project Number: 302288001

Date: 08/08/07

Calculations by: NB

Case: Gowan Road

### ESAL Calculation

$$\text{Equations: } ESAL_i = (ADT_i)(365)\left[\frac{(1+G_i)^t - 1}{G_i}\right](f_d)(P_i)(f_i)$$

$$ESAL_T = \sum ESAL_i$$

Design Life,  $t = 20$

years

Average Daily Traffic,  $ADT_i = 3,860$

vehicles

Growth,  $G_i = 5$

percent

Design Lane Factor,  $f_d = 0.8$

Truck Category	Percent, $P_i$	Average Daily Traffic	Truck Factors, $f_i$	$ESAL_i$
Passenger Cars	93.63	34,895,244	0.0008	27,916
Trucks 39' or less	4.58	1,706,934	0.5796	989,339
Trucks 49' or Longer	1.79	667,120	1.4944	996,945

check: 100.00

Total Equivalent Single Axle Load,  $ESAL_T = 2,014,200$

**AASHTO FLEXIBLE PAVEMENT CALCULATIONS****Ninyo & Moore**

Project Name: Proposed Fire Station 53  
 Project Number: 302288001  
 Date: 08/08/07  
 Calculations by: NB  
 Case: Gowan Road

**Structural Number Calculation**

Equations:  $\log(W_{18}) = Z_R S_o + 9.36 \log(SN+1) - 0.20 + \log\left[\frac{(P_o P_i)}{(4.3-1.5)}\right] / [0.40 + (1094 / (SN+1)^{5.19})] + 2.32 \log(M_R) - 8.07$   
 $M_R = 145(10)^{[0.0147 R + 1.23]}$  (USSPWC Method)

Design ESAL, $W_{18}$	= 2,014,200	Equivalent TI	= 9.8
Reliability, $R$	= 80		
Std. Normal Deviation, $Z_R$	= -0.841		
Standard Deviation, $S_o$	= 0.45		
Initial Serviceability, $P_o$	= 4.2		
Terminal Serviceability, $P_i$	= 2.5		
Subgrade R-Value, $R$	= 19		
Resilient Modulus, $M_R$	= 4,700	psi	
Structural Number, $SN$	= 4.29	(use Solver in Tools menu or iterate SN until target approaches 1.000)	
target	= 1.000		

**Structural Number (Design),  $SN_D$  = 4.29**

**Pavement Section Calculations**

Equations:  $SN_P = (a_a)(D_a) + (a_b)(D_b) + (a_s)(D_s)$   
 $SN_P \geq SN_D$

Asphalt Layer Coefficient, $a_a$	= 0.35		
Base Layer Coefficient, $a_b$	= 0.12		
Subbase Layer Coefficient, $a_s$	= 0.11		
Asphalt Concrete Thickness, $D_a$	= 7	in.	
Base Thickness, $D_b$	= 16	in.	
Subbase Thickness, $D_s$	= 0	in.	
Structural Fill Thickness, $D_{sf}$	= 8	in.	
Structural Number (Provided), $SN_P$	= 4.37	OKAY	
Structural Number (Design), $SN_D$	= 4.29		
			<b>Asphalt Concrete Thickness, <math>D_a</math> = 7 in.</b>
			<b>Base Thickness, <math>D_b</math> = 16 in.</b>
			<b>Subbase Thickness, <math>D_s</math> = 0 in.</b>
			<b>Structural Fill Thickness, <math>D_{sf}</math> = 8 in.</b>

# **EXHIBIT 3**



Mayor  
**Michael L. Montandon**

Councilmen  
**William E. Robinson**  
**Stephanie S. Smith**  
**Shari Buck**  
**Robert L. Eliason**

City Manager  
**Gregory E. Rose**



## **City Clerk's Office**

**Karen L. Storms, CMC, City Clerk**

2200 Civic Center Drive • North Las Vegas, Nevada 89030-6307  
Telephone: (702) 633-1030 • Fax: (702) 649-3846 • TDD: (800) 326-6868  
[www.cityofnorthlasvegas.com](http://www.cityofnorthlasvegas.com)

January 30, 2008

Louise S. Richardson  
Richardson Construction Inc.  
2207 W. Gowan Road  
North Las Vegas, NV 89030

SUBJECT: Bid No. 1287 - Fire Station 53 Project  
(CNLV Contract No. C 6713)

Dear Ms. Richardson:

We are in receipt of all documentation requested in my letter dated January 17, 2008. Enclosed is a fully executed copy of the contract for your files. A Notice to Proceed will be issued shortly.

If you have any questions regarding this contract, please feel free to contact Qiong Liu, Acting Director of Public Works at 633-1233 or Robert E. Huggins, Principal Engineer at 633-2003.

Sincerely,

A handwritten signature in cursive script, appearing to read "Barbara A. Andolina".

Barbara A. Andolina  
Deputy City Clerk

Enc.

cc: Qiong Liu, Acting Director of Public Works  
Al Gillespie, Fire Department Chief  
Robert Huggins, Principal Engineer

PET.APP.000969

**CITY OF NORTH LAS VEGAS**  
**CONSTRUCTION CONTRACT**

BID NO: 1287

DATE: 1-16-08

NAME OF CONTRACTOR: Richardson Construction Inc.

ADDRESS OF CONTRACTOR: 2207 W. Gowan Road, North Las Vegas, NV 89032

Individual ☐ Partnership ☐ Corporation ☒

in the State of Nevada

Contract for CNLV FIRE STATION 53 in  
the amount of Four Million Seven Hundred Four Thousand Dollars and No Cents (\$4,704,000.00).

**THIS CONTRACT** entered into, effective this date by the City of North Las Vegas, Nevada, hereinafter called CITY, represented by the Mayor, executing this Contract, and the individual, partnership, or corporation named above, hereinafter called CONTRACTOR, witnesseth that the parties hereto do mutually agree as follows:

**STATEMENT OF WORK:** The CONTRACTOR shall furnish all labor, equipment and materials and perform the Work above described for the amount stated above in strict accordance with the Contract Documents, including the Specifications of the CITY and the schedule of Drawings and other requirements, all of which are incorporated herein by reference. All Work is the sole responsibility of the CONTRACTOR unless specifically provided otherwise.

**TIME FOR COMPLETION:** The Work which the CONTRACTOR is required to perform under this Contract shall be commenced at a time stipulated by the CITY in the written "Notice-to-Proceed" and shall be completed according to the following:

Three hundred (300) Consecutive Calendar Days to construction completion of the project, including completion of punch list items, final cleanup and demobilization.

**LIQUIDATED DAMAGES:** Liquidated Damages as provided for in the specifications and conditions shall be assessed in the amounts stated below per day for each calendar day after the construction completion date, or applicable extension thereof as provided in the Specifications and Requirements, that completion of the Work is delayed.

- 1) Liquidated Damages for failure to complete the requirements for the Construction Completion milestone within the time period indicated shall be One Thousand Dollars (\$1,000) per day.
- 2) Liquidated Damages for late contract documents noted in the Contract Award Instructions Section, CI.14 shall be TWO HUNDRED DOLLARS (\$200) per day.
- 3) Liquidated Damages for late submittals noted in the Contract Award Instructions Section, CI.15 shall be TWO HUNDRED DOLLARS (\$200) per day.

IN WITNESS WHEREOF, the parties hereto have executed this Contract as of the date entered on the first page hereof.

**CITY OF NORTH LAS VEGAS**

By: 

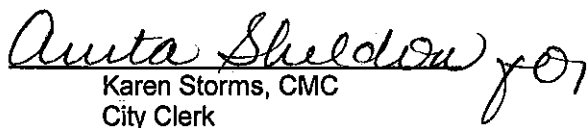
Michael L. Montandon  
Mayor

**CONTRACTOR-RICHARDSON CONSTRUCTION, INC.**

By: 

Title: PRESIDENT

**ATTEST:**

  
Karen Storms, CMC  
City Clerk

**APPROVED AS TO FORM:**

  
Carrie Torrence  
City Attorney

CITY OF NORTH LAS VEGAS

PERFORMANCE BOND

BOND NUMBER 70045090

DATE EXECUTED January 22, 2008

**IMPORTANT: SURETY COMPANIES EXECUTING BONDS MUST BE LICENSED TO ISSUE SURETY BY THE STATE OF NEVADA INSURANCE DIVISION PURSUANT TO NRS 683A.090 AND ISSUED BY AN APPOINTED AGENT PURSUANT TO NRS 683A.280. NOTE: INDIVIDUAL SURETY BONDS ARE NOT ACCEPTABLE.**

KNOW ALL MEN BY THESE PRESENTS, That we, the CONTRACTOR AND SURETY, are held and firmly bound unto the City of North Las Vegas, Nevada, hereinafter referred to as the City, in the penal sum of \$4,704,000 Four Million Seven Hundred Four Thousand Dollars and No Cents for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, That whereas the CONTRACTOR entered into a certain Contract with the City, to perform all Work required under the Bidding Schedule(s), Bid No. 1287, of the City's specifications, entitled CNLV FIRE STATION 53.

NOW THEREFORE, if said CONTRACTOR shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions and agreements of said Contract during the original term of said Contract, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

PROVIDED, that any modifications in the Work to be done or the materials to be furnished, which may be made pursuant to the terms of said Contract, shall not in any way release either said Contractor or said Surety thereunder, nor shall any extensions of time granted under the provisions of said Contract release either said Contractor or said Surety, and notice of such modifications or extensions of the Contract is hereby waived by said Surety.

SIGNED this 22 day of January, 200 8.

P & W Bonds LLC  
(Resident Agent)

19668  
(State of Nevada, License Number)

Anne E Hill  
(Appointed Agent Name)

By: [Signature]  
(Signature)

Address: 3285 S Tioga Way  
Las Vegas, NV 89117

Telephone: 702-364-9953

(SEAL AND NOTARIAL ACKNOWLEDGMENT  
OF SURETY)

Richardson Construction Inc.  
(Principal Contractor)

LOUIS S. RICHARDSON, PRESIDENT  
(Authorized Representative and Title)

By: [Signature]  
(Signature)

Surety: The Guarantee Company of North America USA  
1747  
(State of Nevada, License Number)

Joseph A Clarken III  
(Appointed Agent Name)

By: [Signature]  
(Signature)

Address: 2432 W Peoria Bldg 14 Suite 1240

Phoenix, AZ 85029  
Telephone: 602-906-8714

ISSUING COMPANY MUST HOLD CERTIFICATES OF AUTHORITY AS ACCEPTABLE SURETY ON FEDERAL BONDS AND AS ACCEPTABLE REINSURING COMPANY WITH LISTING IN THE DEPARTMENT OF TREASURY, FISCAL SERVICE, (DEPARTMENT CIRCULAR 570, CURRENT REVISION) AND AS LISTED WITH A. M. BEST COMPANY WITH A RATING OF A OR BETTER.

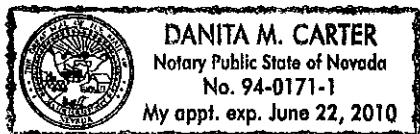


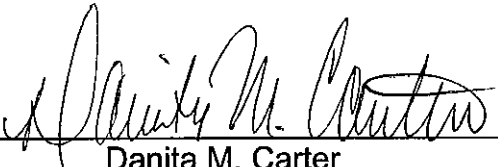
State Of Nevada

County Of Clark

On the 22nd Day of January, 2008 before me, personally appeared Louis Richardson personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the foregoing instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that be his/her/their signature(s) on the instrument the person(s), or the entity on behalf of which the person(s) acted, executed the instrument.

Seal:



By:   
Danita M. Carter  
Notary Public

My Commission Expires:

06/22/2010

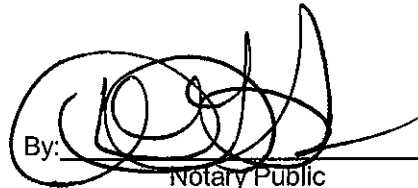
State of Arizona

County of Maricopa

On this 22 day of January, 2008, before me

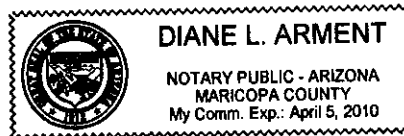
personally appeared Joseph A Clarken III / Attorney-in-Fact

personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the foregoing instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity on behalf of which the person(s) acted, executed the instrument.

By:   
\_\_\_\_\_  
Notary Public  
Diane L. Arment

My Commission Expires:

April 5, 2010



CITY OF NORTH LAS VEGAS  
LABOR AND MATERIAL PAYMENT BOND

BOND NUMBER 70045090  
DATE EXECUTED January 22, 2008

**IMPORTANT: SURETY COMPANIES EXECUTING BONDS MUST BE LICENSED TO ISSUE SURETY BY THE STATE OF NEVADA INSURANCE DIVISION PURSUANT TO NRS 683A.090 AND ISSUED BY AN APPOINTED AGENT PURSUANT TO NRS 683A.280. NOTE: INDIVIDUAL SURETY BONDS ARE NOT ACCEPTABLE.**

KNOW ALL MEN BY THESE PRESENTS, That we, the CONTRACTOR AND SURETY, are held and firmly bound unto the City of North Las Vegas, Nevada, hereinafter referred to as the City, in the penal sum of Four Million Seven Hundred Four Thousand Dollars for the payment of which sum well and truly to be made, and No Cent, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly (\$4,704,000) by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, That whereas the CONTRACTOR entered into a certain Contract with the City, to perform all Work required under the Bidding Schedule(s), Bid No. 1287, of the City's specifications, entitled CNLV FIRE STATION 53.

NOW THEREFORE, if said CONTRACTOR, fails to pay for any materials, equipment, or other supplies, or for rental of same, used in connection with the performance of Work contracted to be done, or for amounts due under applicable State Law for any work or labor thereon, said Surety will pay for the same in an amount not exceeding the sum specified above and in the event suit is brought upon this bond, a reasonable attorney's fee to be fixed by the court. This bond shall insure to the benefit of any persons, companies or corporations entitled to file claims under applicable State Law. This bond shall remain in effect until two (2) years after the date of final acceptance of the Work by the City Council.

PROVIDED, that any modifications in the Work to be done or the materials to be furnished, which may be made pursuant to the terms of said Contract, shall not in any way release either said Contractor or said Surety thereunder, nor shall any extensions of time granted under the provisions of said Contract release either said Contractor or said Surety, and notice of such modifications or extensions of the Contract is hereby waived by said Surety.

SIGNED this 22 day of January, 200 8.

P & W Bonds LLC  
(Resident Agent)  
19668  
(State of Nevada, License Number)  
Anne E Hill  
(Appointed Agent Name)  
By: [Signature]  
(Signature)  
Address: 3285 S Tioga Way  
Las Vegas, NV 89117  
Telephone: 702-364-9953

(SEAL AND NOTARIAL ACKNOWLEDGMENT  
OF SURETY)

Richardson Construction Inc.  
(Principal Contractor)

LOUIS S. RICHARDSON, PRESIDENT  
(Authorized Representative and Title)

By: [Signature]  
(Signature)

1747  
Surety: The Guarantee Company of North America USA

(State of Nevada, License Number)

Joseph A Clarken III  
(Appointed Agent Name)

By: [Signature]  
(Signature)

Address: 2432 W Peoria Bldg 14 Ste 1240, Phoenix  
Telephone: 602-906-8714 AZ 85029

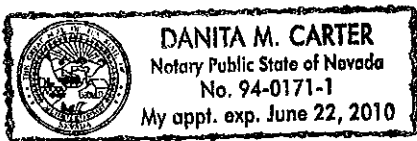
ISSUING COMPANY MUST HOLD CERTIFICATES OF AUTHORITY AS ACCEPTABLE SURETY ON FEDERAL BONDS AND AS ACCEPTABLE REINSURING COMPANY WITH LISTING IN THE DEPARTMENT OF TREASURY, FISCAL SERVICE, (DEPARTMENT CIRCULAR 570, CURRENT REVISION) AND AS LISTED WITH A. M. BEST COMPANY WITH A RATING OF A OR BETTER.

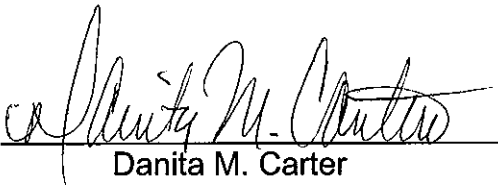
State Of Nevada

County Of Clark

On the 22nd Day of January, 2008 before me, personally appeared Louis Richardson personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the foregoing instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that be his/her/their signature(s) on the instrument the person(s), or the entity on behalf of which the person(s) acted, executed the instrument.

Seal:



By:   
Danita M. Carter  
Notary Public

My Commission Expires:

06/22/2010



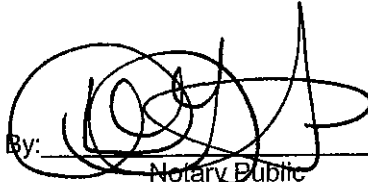
State of Arizona

County of Maricopa

On this 22 day of January, 20 08, before me

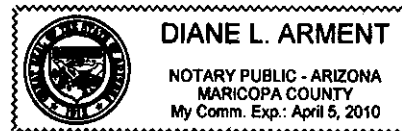
personally appeared Joseph A Clarken III / Attorney-in-Fact

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By:   
\_\_\_\_\_  
Notary Public  
Diane L. Arment

My Commission Expires:

April 5, 2010



CITY OF NORTH LAS VEGAS

GUARANTEE BOND

BOND NUMBER 70045090  
DATE EXECUTED January 22, 2008

**IMPORTANT: SURETY COMPANIES EXECUTING BONDS MUST BE LICENSED TO ISSUE SURETY BY THE STATE OF NEVADA INSURANCE DIVISION PURSUANT TO NRS 683A.090 AND ISSUED BY AN APPOINTED AGENT PURSUANT TO NRS 683A.280. NOTE: INDIVIDUAL SURETY BONDS ARE NOT ACCEPTABLE.**

GUARANTEE for Richardson Construction Inc.  
2207 W Gowan Road, North Las Vegas, NV 89030  
(Name and Address of Prime Contractor)

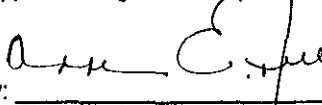
We hereby guarantee that the CNLV FIRE STATION 53 which we have constructed, has been completed in accordance with the Contract Documents, and that the Work as constructed will fulfill the requirements of the guaranties included in the Contract Documents. We agree to repair or replace any or all of the Work together with any other adjacent Work which may be damaged in so doing, that may prove to be defective in workmanship or materials within a period of one year from the date of final acceptance of the above-named Work by the City of North Las Vegas, State of Nevada, without expense whatsoever to the City of North Las Vegas, ordinary wear and unusual abuse or neglect are exempted.

In the event of our failure to comply with the above-mentioned conditions within five (5) days after being notified in writing by the City of North Las Vegas, Nevada, we collectively or separately do hereby authorize the City of North Las Vegas to proceed to have said defects repaired and made good at our expense and we will honor and pay the costs and charges therefore upon demand.

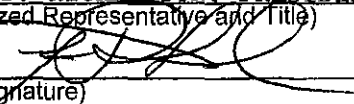
Date of Completion \_\_\_\_\_

SIGNED this 22 day of January, 2008.

(SEAL AND NOTARIAL ACKNOWLEDGMENT  
OF SURETY)

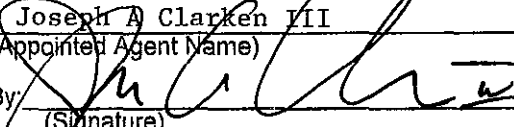
P & W Bonds LLC  
(Resident Agent)  
19668  
(State of Nevada, License Number)  
Anne E Hill  
(Appointed Agent Name)  
By:   
(Signature)  
Address: 3285 S Tioga Way  
Las Vegas, NV 89117  
Telephone: 702-364-9953

Richardson Construction Inc.  
(Principal Contractor)  
LOUIS S. RICHARDSON, PRESIDENT  
(Authorized Representative and Title)

By:   
(Signature)

Surety: The Guarantee Company of North America  
1747  
USA  
(State of Nevada, License Number)

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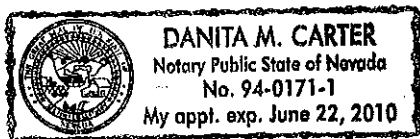
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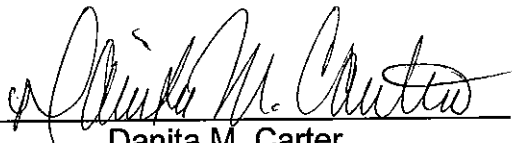
State Of Nevada

County Of Clark

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Seal:



By:   
Danita M. Carter  
Notary Public

My Commission Expires:

06/22/2010

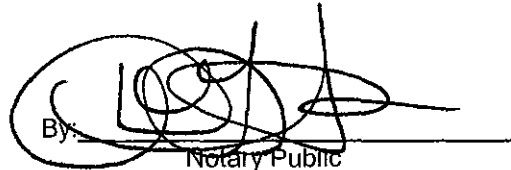
State of Arizona

County of Maricopa

On this 22 day of January, 2008, before me

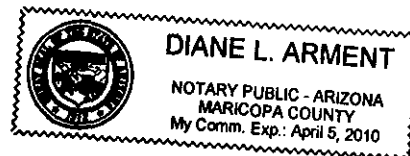
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By:   
Notary Public  
Diane L. Arment

My Commission Expires:

April 5, 2010







# THE GUARANTEE COMPANY OF NORTH AMERICA USA

Southfield, Michigan

## POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS: That THE GUARANTEE COMPANY OF NORTH AMERICA USA, a corporation organized and existing under the laws of the State of Michigan, having its principal office in Southfield, Michigan, does hereby constitute and appoint

**Andrew J. Paffenbarger, Joseph A. Clarken III, Scott Wareing, Diane L. Arment, Bob Walden,  
Anne E. Hill, Jennifer Castillo  
Paffenbarger & Walden, LLC**

its true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise.

The execution of such instrument(s) in pursuance of these presents, shall be as binding upon THE GUARANTEE COMPANY OF NORTH AMERICA USA as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at the principal office.

The Power of Attorney is executed and may be certified so, and may be revoked, pursuant to and by authority of Article IX, Section 9.03 of the By-Laws adopted by the Board of Directors of THE GUARANTEE COMPANY OF NORTH AMERICA USA at a meeting held on the 31<sup>st</sup> day of December, 2003. The President, or any Vice President, acting with any Secretary or Assistant Secretary, shall have power and authority:

1. To appoint Attorney(s)-in-fact, and to authorize them to execute on behalf of the Company, and attach the Seal of the Company thereto, bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof; and
2. To revoke, at any time, any such Attorney-in-fact and revoke the authority given.

Further, this Power of Attorney is signed and sealed by facsimile pursuant to resolution of the Board of Directors of the Company adopted at a meeting duly called and held on the 31<sup>st</sup> day of December 2003, of which the following is a true excerpt:

RESOLVED that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, contracts of indemnity and other writings obligatory in the nature thereof, and such signature and seal when so used shall have the same force and effect as though manually affixed.

IN WITNESS WHEREOF, THE GUARANTEE COMPANY OF NORTH AMERICA USA has caused this instrument to be signed and its corporate seal to be affixed by its authorized officer, this 30th day of August, 2006.

THE GUARANTEE COMPANY OF NORTH AMERICA USA



State of Michigan  
County of Oakland

Stephen Dullard, Vice President

On this 30th day of August, 2006 before me came the individual who executed the preceding instrument, to me personally known, and being by me duly sworn, said that he is the herein described and authorized officer of The Guarantee Company of North America USA; that the seal affixed to said instrument is the Corporate Seal of said Company; that the Corporate Seal and his signature were duly affixed by order of the Board of Directors of said Company.

IN WITNESS WHEREOF, I have hereunto set my hand at The Guarantee Company of North America USA offices the day and year above written.

Cynthia A. Takai  
Notary Public, State of Michigan  
County of Oakland  
My Commission Expires February 27, 2012  
Acting in Oakland County

Cynthia A. Takai



I, Randall Musselman, Secretary of THE GUARANTEE COMPANY OF NORTH AMERICA USA, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by THE GUARANTEE COMPANY OF NORTH AMERICA USA, which is still in full force and effect.

IN WITNESS WHEREOF, I have thereunto set my hand and attached the seal of said Company this 22 day of January 2008

Randall Musselman

Randall Musselman, Secretary



PET.APP.000981

# **EXHIBIT 4**

(2)

20090713-0000778

Fee: \$15.00

N/C Fee: \$0.00

07/13/2009

08:13:23

T20090716

Requestor:

NORTH LAS VEGAS CITY

Debbie Conway

JRV

Clark County Recorder Pgs: 2

**NOTICE OF COMPLETION**  
**Parcel # 139-08-601-010**

NOTICE is hereby given that:

1. The undersigned is OWNER of the interest stated below in the property hereinafter described.
2. The NAME (including that of the undersigned), and ADDRESS of every person owning any interest in such property is as follows:

CITY OF NORTH LAS VEGAS  
2200 CIVIC CENTER DRIVE  
NO. LAS VEGAS, NV 89030

3. The names and addresses of the transferors of the undersigned owner: (to be shown if the under-signed is a successor in interest of the owner who caused the improvement to be constructed, etc.)
4. A work of improvement on the property hereinafter described was completed on

**March 17, 2009**

5. The name of the CONTRACTOR, if any, for such work of improvement was

**Richardson Construction, Inc.**

6. The property on which said work of improvement was completed is in the City of North Las Vegas, County of Clark, State of Nevada, and is described as:

The Fire Station #53 Project includes construction of a 15,000 square foot building with 4 apparatus bays, 14 dorms, kitchen, training, exercise and locker rooms, emergency generator, paved parking lot, landscaping, and associated onsite and offsite improvements. The station is located on a City-owned parcel at 2800 West Gowan Road, east of Simmons Street.