

BID FOR
SANITARY SEWER IMPROVEMENT PROJECT-MCCARRAN
BLVD AND PRATER WAY

BID # 24/25-012

PWP # WA-2025-205

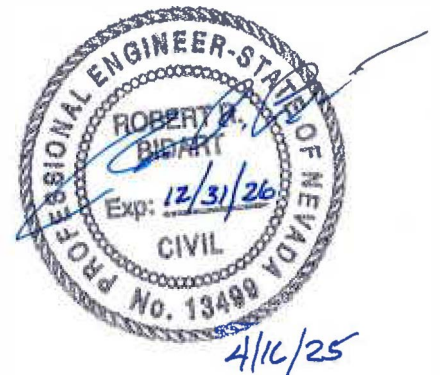
BIDS DUE NOT LATER THAN: 1:45 PM ON APRIL 30, 2025

PUBLIC BID OPENING: 2:00 PM ON APRIL 30, 2025

[NOTE: TIME BIDS ARE DUE IS DIFFERENT FROM BID OPENING TIME]



431 PRATER WAY
P.O. BOX 857
SPARKS, NV 89432-0857



Company Name: _____

**CITY OF SPARKS
NOTICE TO BIDDERS
SANITARY SEWER IMPROVEMENTS PROJECT–MCCARRAN BLVD AND PRATER WAY
BID # 24/25-012 / PWP # WA-2025-205**

NOTICE IS HEREBY GIVEN that the City of Sparks, Nevada, will receive written sealed bids only, for the project listed above. Said bids must be in the hands of the Contracts and Risk Manager at 431 Prater Way, Sparks, Nevada, NO LATER THAN **1:45 PM ON APRIL 30, 2025**. Bids postmarked prior to, but not received until after this deadline will not be accepted. Vendor bid response submittals may not be sent to the City of Sparks via the Internet/e-mail and will not be entertained for award by the City of Sparks. The right is reserved to reject any Bid/Proposal or to accept the Bid/Proposal which is deemed by the City of Sparks to be in the best interest of the City of Sparks. The City of Sparks reserves the right to waive any irregularities and/or informalities in the bid process.

All Bids are to be marked clearly on the outside. Due to hybrid schedules and staff reductions, in-person staff availability is limited. Bidders wishing to physically deliver their bids on the bid due date shall note that the Purchasing Office will receive bids in the lobby of City Hall beginning at 1PM on April 30, 2025. Bids are due no later than 1:45PM. Bids may also be delivered to the Purchasing Department physical dropbox/mailbox, also located in the lobby of City Hall.

Bids will be opened and publicly read at **2:00 PM ON APRIL 30, 2025** via Microsoft Teams video/audio conferencing. Meeting # 211 107 147 068. Meeting Passcode: Ld7J4ag9 with a direct link of:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_YjAxY2RjMWMtNDQ4Yi00MTk1LTU0ZDAtZTc3OWY3NjZIYTcx%40thread.v2/0?content=%7b%22Tid%22%3a%22e9aaa7d1-5f6d-41fa-8d1e-584512d66361%22%2c%22Oid%22%3a%223c37b268-069a-4b2a-9df9-831e998d4f69%22%7d

PROJECT DESCRIPTION: The work includes but is not limited to, placement of a new sewer mainline and manhole structures. Removal of abandon asbestos waterline. Asphalt patching, mill and overlay, including placement of NDOT Open Grade, striping, and traffic control as detailed in the bid document.

BONDING/LICENSING: A Bid Bond in the amount of 5% of bid amount is required. This bid bond will function as a penalty in the event the successful bidder fails to enter into a written contract with the City in accordance with the bid documents. Additionally, the City will be entitled to actual damages, if any. Prospective bidders will be required to have a current Contractor's License under the Nevada State Law for the type of work specified herein.

The work to be performed under this Contract shall be commenced by the successful Bidder after all executed Contract documents have been submitted, and after being notified to proceed by the City of Sparks.

Bid documents and specifications may be obtained from the City of Sparks website. Please visit <http://portal.cityofsparks.us/bids> to obtain complete bid documents. There is no cost to use the system or obtain plans, but registration at the site is required. It is the responsibility of all potential bidders/responders to monitor the Purchasing Division's website for any changing information prior to submitting their bid/proposal. The City of Sparks will not be responsible for the timeliness or completeness of information provided by any 3rd party bid listing or re-selling service. For further information, contact the individual responsible for coordinating this bid: Amber Sosa, P.E. – City Engineer @ asosa@cityofsparks.us.

Reno Gazette Journal Legal Notices Section
Publish Date: April 16, 2025
Proof of publication required

Bidder's Checklist

Bidders are instructed to complete and return the following forms in order for their bids to be complete. Failure to return the following items may result in your bid being declared “non-responsive.”

1. _____ Bid Item Schedule
2. _____ Bidder Information Sheets
3. _____ Subcontractor Information Form (5% list due with bid submittal)
4. _____ Acknowledgement and Execution Form
5. _____ Certification Regarding Debarment
6. _____ “Certificate of Eligibility” (Local Preference) - If bid exceeds \$250,000 and Contractor wishes to potentially apply their preference.
7. _____ Bid Bond
8. _____ Signed Bid Addenda (if applicable)

**CITY OF SPARKS
BID ITEM SCHEDULE**

BID TITLE: SANITARY SEWER IMPROVEMENTS PROJECT-McCARRAN BLVD & PRATER WAY

BID # 24/25-012 PWP# WA-2025-205

PRICES must be valid for 90 calendar days after the bid opening.

COMPLETION of this project is expected **PURSUANT TO CONTRACT DOCUMENTS.**

BIDDER acknowledges receipt of _____ Addenda.

Bidder Name

(signature)

Refer to Special Technical Section for map depicting street locations and plan sheets provided

Item No.	Quantity	Unit	Description	Unit Price	Total Price
1	1	LS	Mobilization/Demobilization/Cleanup	\$ _____ /LS	\$ _____
2	1	LS	Bypass Pumping, complete and in-place	\$ _____ /LS	\$ _____
3	12	LF	Remove Existing 18" Sewer Pipe, complete and in place	\$ _____ /LF	\$ _____
4	144	LF	Fill Existing 10-inch Sewer Pipe with Cellular Concrete, complete and in place	\$ _____ /LF	\$ _____
5	59	LF	Remove Existing 12-inch Abandoned Transite Water Line, Including Asbestos Abatement, Handling, Storage & Disposal Plan (AAHSD), Permitting, Backfill with Aggregate Base and Compaction, complete and in place	\$ _____ /LF	\$ _____
6	1	EA	Remove and Dispose of Existing Manhole, complete and in place	\$ _____ /EA	\$ _____
7	151	LF	Furnish and Install 18-inch ASTM F679 PS 46 Sanitary Sewer Main Pipe, Temporary Patch and ALL Appurtenances, complete and in place	\$ _____ /LF	\$ _____

8	1	EA	Furnish & Install 60-inch Type IV Sanitary Sewer Manhole, including Excavation and Backfill and ALL Appurtenances, Including New Frame and Cover, complete and in place	\$ _____ /EA	\$ _____
9	1	LS	Connect New 18-inch Pipe to Existing Manhole, STA. 1+75.94, Removal and Replacement of Existing Cone, Grout Fill and Plug 18-inch Northwest Channel, and ALL Appurtenances, complete and in place	\$ _____ /LS	\$ _____
10	10	SF	Remove Existing and Construct PCC Median Curb Island, complete and in place	\$ _____ /SF	\$ _____
11	1,850	SF	Permanent Bituminous Pavement Patch, 8-inch Depth, complete and in-place	\$ _____ /SF	\$ _____
12	3,445	SF	Grind & Inlay, 1-inch Depth, Open Grade, complete and in place	\$ _____ /SF	\$ _____
13	6,400	SF	Grind & Overlay, 3-inch Depth, complete and in place	\$ _____ /SF	\$ _____
14	5	EA	Protect and Adjust Manhole Structure (New or Existing) to Finish Grade with New PCC Collar, complete and in-place	\$ _____ /EA	\$ _____
15	2	EA	Protect and Adjust Existing Gas and Water Valve Box to Finish Grade, complete and in-place	\$ _____ /EA	\$ _____
16	1	EA	Reconstruct NDOT Survey Monument, complete and in-place	\$ _____ /EA	\$ _____
17	12	EA	Replace Loop Detectors, complete and in place	\$ _____ /EA	\$ _____
18	254	LF	Install 4" Solid Yellow or White Pavement Striping, (Type II Waterborne) complete and in-place	\$ _____ /LF	\$ _____
19	113	LF	Install 4" Single Skip White Stripe, (Type II waterborne) complete and in place	\$ _____ /LF	\$ _____
20	60	LF	Install 8" Solid White Pavement Striping, (Type II Waterborne) complete and in-place	\$ _____ /LF	\$ _____

21	45	LF	Install 24" Solid White Stop Bar, (Thermoplastic) complete and in-place	\$ _____ /LF	\$ _____
22	210	LF	Install Solid White 2' x 10' International Crosswalk (Thermoplastic), complete and in-place	\$ _____ /LF	\$ _____
23	1	EA	Install Preformed Solid White Symbol, Right Arrow, (Thermoplastic) complete and in-place	\$ _____ /EA	\$ _____
24	1	LS	Traffic Control, complete and in-place	\$ _____ /LS	\$ _____
25	1	LS	Force Account	\$85,000	\$85,000
Total Price for SANITARY SEWER IMPROVEMENTS PROJECT- McCARRAN BLVD & PRATER WAY \$ _____ (written total bid price)				\$ _____	

Bidder Information

COMPANY INFORMATION:

Company Name:
Contact Name:
Address:
City:
State / Zip Code:
Telephone Number including area code:
Fax Number including area code:
E-mail:

COMPANY BACKGROUND

- 1) Has your company ever failed to complete any contracts awarded to it? No___ Yes___ (If yes, please provide details.)
- 2) Has your company filed any arbitration request or law suits on contracts awarded within the last five years? No___ Yes___ (If yes, please provide details.)
- 3) Does your company now have any legal suits or arbitration claims pending or outstanding against it or any officers relating to the performance of a public contract? No___ Yes___ (If yes, please provide details.)
- 4) Does your company now employ any officers or principals who were with another firm when that company failed to complete a contract within the last five years? No___ Yes___ (If yes, please provide details.)
- 5) Has your company had a contract partially or completely terminated for default (cause) within the past five years? No___ Yes___ (If yes, please provide details.)
- 6) Has your company been found non-responsible on a government bid within the last five years? No___ Yes___ (If yes, please provide details.)

Bidder Information

CONTRACTOR LICENSE INFORMATION:

Nevada State Contractor's License Number (If Applicable):
License Classification(s):
Limitation(s) of License:
Date Issued:
Date of Expiration:
Name of Licensee:
City, State, Zip Code of Licensee:
Telephone Number of Licensee:

BUSINESS LICENSING INFORMATION All vendors doing business within the City of Sparks are required to obtain and maintain a current business license from the City of Sparks prior to commencement of work (Sparks Municipal Code Section 5.08.020A). Vendor(s) awarded a contract resulting from this bid shall be required to obtain a current business license if they do not already hold one.

City of Sparks Business License Number:
Date Issued:
Date of Expiration:
Name of Licensee:
City, State, Zip Code of Licensee:
Telephone Number of Licensee:
Taxpayer Identification Number:

Bidder Information

DISCLOSURE OF PRINCIPALS:

a) Individual and/or Partnership:

Owner 1) Name:
Address:
City, State, Zip Code:
Telephone Number:
Owner 2) Name:
Address:
City, State, Zip Code:
Telephone Number:
Other 1) Title:
Name
Other 2) Title:
Name:

b) Corporation:

State in which Company is Incorporated:
Date Incorporated:
Name of Corporation:
Address
City, State, Zip Code:
Telephone Number:
President's Name:
Vice-President's Name:
Other 1) Name:
Title:

Awarded Contract Information

If your company is determined to be the awardee of the contract for this scope of work, the contract form for the work will be routed via electronic means. Therefore, please identify the authorized individual that will be signing the resulting contract. Presumably this will be the company owner or corporate officer authorized to bind the company for future work.

COMPANY INFORMATION:

Company Name:
Authorized Name:
Title:
Individual E-Mail Address:
Telephone Number including area code:
Mailing Address:

SUBCONTRACTOR DETAIL
SUBCONTRACTORS EXCEEDING FIVE PERCENT OF BID AMOUNT

INSTRUCTIONS: Per NRS 338.141, Bidder submits the following names of First-Tier Subcontractors who will provide to Bidder labor or a portion of the Work or improvements for which Subcontractor will be paid an amount exceeding five percent (5%) of the Bid Price. The Bidder shall list the name of a Subcontractor for each portion of the Work, the value of which exceeds five percent (5%) of the Bid Price. **If Bidder will perform more than 5% of the Work, BIDDER SHALL ALSO LIST HIS NAME and description of the work that the prime contractor will perform in the space provided below.**

Name of Subcontractor	Address	
Phone	Nevada Contractor License #	Limit of License
Description of Work:		
Name of Subcontractor	Address	
Phone	Nevada Contractor License #	Limit of License
Description of Work:		
Name of Subcontractor	Address	
Phone	Nevada Contractor License #	Limit of License
Description of Work:		
Name of Subcontractor	Address	
Phone	Nevada Contractor License #	Limit of License
Description of Work:		
Name of Subcontractor	Address	
Phone	Nevada Contractor License #	Limit of License
Description of Work:		
Name of Subcontractor	Address	
Phone	Nevada Contractor License #	Limit of License
Description of Work:		

Bidder Name: _____

Authorized Signature: _____

SUBCONTRACTOR DETAIL
SUBCONTRACTORS EXCEEDING ONE PERCENT OF BID AMOUNT OR \$50,000

INSTRUCTIONS: In compliance with NRS 338.141, Bidder submits the following names of First-Tier Subcontractors who will provide to Bidder labor or a portion of the Work or improvements for which Subcontractor will be paid an amount exceeding one percent (1%) of the Bid or \$50,000, whichever is greater.

Since all Subcontractors listed on the Bidder's 5% Subcontractor Information Form are over 1% of the Bid amount, those Subcontractors shall automatically be deemed incorporated into this 1% Subcontractor Information form and need not be re-listed below.

Information provided must be submitted within two (2) hours after the completion of the opening of the bids (Per NRS 338.141). Bidder shall enter "NONE" under "Name of Subcontractor" if not utilizing subcontractors exceeding this amount. This form must be complete in all respects. If, additional space is needed, attach a separate page. The bidder may elect to submit this information with the bid proposal and, in that case, the bidder will be considered as having submitted this information within the above two hours.

Name of Subcontractor	Address	
Phone	Nevada Contractor License #	Limit of License
Description of Work:		
Name of Subcontractor	Address	
Phone	Nevada Contractor License #	Limit of License
Description of Work:		
Name of Subcontractor	Address	
Phone	Nevada Contractor License #	Limit of License
Description of Work:		
Name of Subcontractor	Address	
Phone	Nevada Contractor License #	Limit of License
Description of Work:		

Bidder Name: _____ **Authorized Signature:** _____

CITY OF SPARKS ACKNOWLEDGMENT AND EXECUTION:

STATE OF _____)
) SS
County of _____)

_____, (Name of Principal) being first duly sworn, deposes and says: That he/she is the Bidder, or authorized agent of the Bidder for whom the aforesaid described work is to be performed by; that he/she has read the Plans, Specifications, and related documents including but not limited to, any addenda issued and understands the terms, conditions, and requirements thereof; that if his/her bid is accepted that he/she agrees to furnish and deliver all materials except those specified to be furnished by the City of Sparks (Owner) and to do and perform all work for the **SANITARY SEWER IMPROVEMENT PROJECT – MCCARRAN BLVD AND PRATER WAY, Bid # 24/25-012**, together with incidental items necessary to complete the work to be constructed and/or services to be provided in accordance with the Specifications, Plans, and Contract Documents annexed hereto.

TO THE CONTRACTS AND RISK MANAGER OF THE CITY OF SPARKS:

The undersigned, as Bidder, declares that the only persons or parties interested in this proposal, as principals, are those named herein, the Bidder is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid: that this proposal is made without collusion with any other person, firm or corporation; that he/she has carefully examined the location of the proposed work; the proposed form of Contract, the Contract Provisions, Plans, Specifications and Contract Documents incorporated therein referred to and made part thereof; that he/she proposes and agrees if this proposal is accepted, that he/she will contract with the City of Sparks in the form of the Contract prescribed, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the Contract and annexed Contract Provisions, Plans and Specifications, in the manner and time prescribed and according to the requirements of the Project Representative as therein set forth, it being understood and agreed that the quantities shown herein are approximate only and are subject to increase or decrease, and that he/she will accept, in full, payment therefore the indicated prices.

	Contractor/Bidder:
(Printed Name of Contractor/Bidder)	BY: _____
	Firm: _____
	Address: _____
	City: _____
	State / Zip Code: _____
	Telephone Number: _____
	Fax Number: _____
	E-mail Address: _____
(Signature of Principal)	Signature: _____
	DATED this _____ day of _____, 2024.

State of Nevada)
) SS.
County of _____)
On this _____ day of _____, in the year 2024, before me,

/Notary Public, personally appeared	Personally known to me (or proved
to me on the basis of satisfactory evidence) to be the person whose name is subscribed to this instrument, and acknowledged that he (she) executed it. WITNESS my hand and official seal.	
Notary's Signature: _____	My commission Expires: _____

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER
RESPONSIBILITY MATTERS**

(This form to be signed and returned at the time of bid)

This certification is required by the Federal Regulations Implementing Executive Order 12549, Debarment and Suspension, 45 CFR Part 93, Government-wide Debarment and Suspension, for the Department of Agriculture (7 CFR Part 3017), Department of Labor (29 CFR Part 98), Department of Education (34 CFR Parts 85, 668, 682), Department of Health and Human Services (45 CFR Part 76).

The prospective bidder, _____ certifies to the best of its knowledge and belief that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. Any exceptions provided will not necessarily result in denial of award, but will be considered in determining bidder responsibility and whether or not the City will enter into contract with the party. For any exception noted, indicate on an attached sheet to whom it applies, initiating agency, and dates of action. Providing false information may result in criminal prosecution or administrative sanctions.

Typed Name & Title of Authorized Representative

Signature of Authorized Representative

Date

I am unable to certify to the above statement. My explanation is attached.

Signature _____ Date _____

Local Preference Affidavit

NEW Instructions: This form is required to receive a preference in bidding on projects exceeding \$250,000. This form must be submitted no later than two (2) hours following the opening of bids, only if the bidder wishes for their preferential status(established by their current Certificate of Eligibility) to be considered in the evaluation of bids. A copy of the bidder's Certificate of Eligibility must be submitted at the time the contractor submits their bid.

I, _____, on behalf of the Contractor, _____, swear and affirm that in order to be in compliance with NRS 338.0117 and be eligible to receive a preference in bidding **SANITARY SEWER IMPROVEMENT PROJECT – MCCARRAN BLVD AND PRATER WAY (Bid #24/25-012)** certify that the following requirement will be adhered to, documented and attained on completion of the contract. Upon submission of this affidavit on behalf of _____, I recognize and accept that failure to comply with any requirements is a material breach of the contract and entitles the City to damages. In addition, the Contractor may lose their preference designation and/or lose their ability to bid on public works for a period of time, pursuant to NRS 338:

1. The Contractor shall ensure at least 50 percent of workers employed on the public work possess a Nevada driver's license or identification card;
2. The Contractor shall ensure all vehicles used primarily for the public work will be registered and (where applicable) partially apportioned to Nevada;
3. The Contractor shall ensure payroll records related to this project are maintained and available within the State of Nevada.

These requirements are not applicable to Contractors who do not use the "Bidder's Preference" eligibility certificate in their bid or do not receive an advantage in ranking of bids due to their preference status.

By: _____ Title: _____

Signature: _____ Date: _____

Signed and sworn to (or affirmed) before me on this _____ day of _____, 20____, by _____ (name of person making statement).

State of _____)

)ss.

County of _____)

Notary Signature

STAMP AND SEAL

CITY OF SPARKS, NEVADA – 5% Bid Bond

KNOW ALL MEN BY THESE PRESENTS: That we the undersigned _____, as “Principal,” and _____, as “Surety,” are hereby held and firmly bound unto the City of Sparks, Nevada, as “Obligee,” in the penal sum of _____ dollars (\$_____) for the payment of which, well and truly to be made, the Principal and Surety bind themselves, their heirs, executors, and administrators, successors and assigns, jointly and severally, by this instrument. The condition of the obligation of this bid bond is as follows:

WHEREAS, NRS 332.105 authorizes local governments to require bid bonds to insure execution and proper performance of the Contract and the Bonding Company has an “A” or better rating with Moody’s or A.M. Best and T-Listed with the U.S. Treasury Department;

AND, WHEREAS, the Principal has submitted a bid for Bid # **24/25-012**, PWP # **WA-2025-205**, for the **SANITARY SEWER IMPROVEMENT PROJECT – MCCARRAN BLVD AND PRATER WAY**.

NOW, THEREFORE,

- (a) If said Bid shall be rejected; or
- (b) If said Bid shall be accepted and the Principal shall execute and deliver the contract in the bid documents (“Contract”) to Obligee in accordance with the terms of the bid documents, and give such bond or bonds as may be specified in the bid or contract documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or
- (c) If the Principal shall pay to the Obligee the full amount of the bid bond as a penalty irrespective of the Obligee’s actual damages in the event of the failure of the Principal to enter into such Contract and give such bond or bonds,

then, this obligation shall be null and void. Otherwise it shall remain in full force and effect, it being expressly understood and agreed that the liability of the Surety (but not of the Principal) for any and all claims hereunder shall, in no event, exceed the penal amount of the obligation as herein stated.

The Surety, for the consideration for which this bond was executed, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Obligee may accept such bid, and hereby waives notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and the Surety has caused their seal to be hereto affixed and these present to be signed by their proper officers.

Signed, Sealed and dated: _____

Principal

By: _____

Surety

By: _____

GENERAL CONDITIONS

General Conditions



GENERAL CONDITIONS

Please Read Carefully

These Provisions Are a Part of Your Bid and any Contract Awarded

Scope of Bid/Proposal: Bids/Proposals are hereby requested for **SANITARY SEWER IMPROVEMENT PROJECT – MCCARRAN BLVD AND PRATER WAY**, as per specifications herein.

The bidder agrees that:

- A. Bidder has carefully examined the specifications, and all provisions relating to the item(s) to be furnished or the work to be done; understands the meaning, intent, and requirements; and
- B. Bidder will enter into a written contract and furnish the item(s) or complete the work in the time specified, and in strict conformity with the City of Sparks specifications for the prices quoted.

Note: Bidder is defined as any individual, partnership, or corporation submitting a bid, proposal, or quotation in response to a request for bid (RFB), request for proposal (RFP), request for information (RFI) or request for quotation (RFQ). A bidder may also be referred to as a bidder, contractor, supplier or vendor.

The use of the title "Bidder," "Vendor," "Contractor" or "Consultant" within this solicitation document and any resulting contract shall be deemed interchangeable and shall refer to the person or entity with whom the City of Sparks is soliciting and/or contracting for the service or product referenced within the bid document.

1. Prices:

All prices and notations must be in ink or typewritten. Mistakes may be crossed out and corrections typed or written with ink adjacent to the error. Bids shall indicate the unit price extended to indicate the total price for each item bid. Any difference between the unit price correctly extended and the total price shown for all items bid shall be resolved in favor of the unit prices. Bidders are encouraged to review all prices prior to bid submittal, as withdrawal or correction may not be permitted after the bid has been opened.

2. Firm Prices:

Prices on bid shall be firm prices not subject to escalation unless otherwise provided for in the specifications. In the event the specifications provide for escalation, the maximum limit shall be shown, or the bid shall not be considered. In the event of a decline in market price below a price bid, the City of Sparks shall receive the benefit of such decline.

3. Items Offered:

If the item offered by the bidder has a trade name, brand and/or catalog number, such shall be stated in the bid. If the bidder proposes to furnish an item of a manufacturer or vendor other than that mentioned on the face hereof, bidder must specify maker, brand, quality, catalog number, or other trade designation. Unless such is noted on the bid form, it will be deemed that the item offered is that designated even though the bid may state "or equal".

4. Brand Names:

Whenever reference to a specific brand name is made by the City, it is intended to describe a component that has been determined to best meet operational, performance, or reliability standards of the City, thereby incorporating these standards by reference within the specifications. These specifications are not meant to limit the vendor; they are guidelines to minimum qualifications. The bidder shall indicate their compliance or non-compliance for each line of the specification. Any deviations from the specifications or where submitted literature does not fully support the meaning of the specifications must be clearly cited in writing by the bidder.

General Conditions



An equivalent ("or equal") may be offered by the bidder, subject to evaluation and acceptance by the City. It is the bidder's responsibility to provide, at bidder's expense, samples, test data, or other documentation the City may require to fully evaluate and determine acceptability of an offered substitute. The City reserves the sole right to reject a substituted component that will not meet or exceed City standards.

5. Samples:

Samples may be required for bid evaluation and testing purposes. Bidders shall agree to provide samples upon request and at no additional cost to the City.

6. Withdrawal of Bids:

Bids may be withdrawn by written or facsimile notice received prior to the exact hour and date specified for receipt of bid. A bid may also be withdrawn in person by a bidder, or bidder's authorized representative, prior to the exact hour and date set for receipt of bids. Telephone withdrawals are not permitted.

7. Late Bids, Modifications, or Withdrawals:

Bids, modifications of bids, or bid withdrawals received after the exact time and date specified for receipt will not be considered.

8. Mistake in Bid:

- (a) If the bidder discovers a mistake in bid prior to the hour and date specified for receipt of bid, bidder may correct the mistake by withdrawing the bid in accordance with Item 7 above and resubmit prior to the stated bid deadline.
- (b) If within seventy-two hours of the bid closing and prior to the issuance of a purchase order or a contract, the apparent low bidder discovers a mistake in bid of a serious and significant nature, bidder may request consideration be given to withdrawing the bid. The mistake must be evident and provable. The right is reserved by the City to reject any and all requests for withdrawal of bids. The decision of the Purchasing Manager is final as regards acceptance or rejection of requests for withdrawal after closing of bids.
- (c) A mistake in bid cannot be considered once a purchase order or contract is issued.

9. Signature:

All bids shall be signed and the title and firm name indicated. A bid by a corporation shall be signed by an authorized officer, employee or agent with his or her title.

10. Exceptions:

A bidder deviating from specifications must specify any and all deviation(s). Failure to note said exceptions shall be interpreted to convey that the bidder shall propose to perform in the manner described and/or specified in this bid solicitation. If exception(s) are taken or alternatives offered, complete descriptions must be shown separately.

11. Confidential Information:

Any information deemed confidential or proprietary should be clearly identified by the bidder as such. It may then be protected and treated with confidentiality only to the extent permitted by state law. Otherwise the information shall be considered a public record. Information or data submitted with a bid will not be returned.

12. Quality:

Unless otherwise required in the specifications, all goods furnished shall be new and unused.



13. Litigation Warranty:

The bidder, by bidding, warrants that bidder is not currently involved in litigation or arbitration concerning the materials or bidder's performance concerning the same or similar material or service to be supplied pursuant to this contract of specification, and that no judgments or awards have been made against bidder on the basis of bidder's performance in supplying or installing the same or similar material or service, unless such fact is disclosed to the City in the bid. Disclosure may not disqualify the bidder. The City reserves the right to evaluate bids on the basis of the facts surrounding such litigation or arbitration and to require bidder to furnish the City with a surety bond executed by a surety company authorized to do business in the State of Nevada and approved by The City of Sparks in a sum equal to one hundred percent (100%) of the contract price conditional on the faithful performance by bidder of the contract in the event the bid is awarded to bidder, notwithstanding the litigation or arbitration.

14. Royalties, Licenses and Patents:

Unless otherwise specified, the bidder shall pay all royalties, license and patent fees. The bidder warrants that the materials to be supplied do not infringe any patent, trademark or copyright and further agrees to defend any and all suits, actions and claims for infringement that are brought against the City, and to defend, indemnify and hold harmless the City from all loss or damages, whether general, exemplary or punitive, as a result of any actual or claimed infringement asserted against the City, the bidder or those furnishing material to bidder pursuant to this contract.

15. Performance Standards:

Performance of work and acceptability of equipment or materials supplied pursuant to any contract or award shall be to the satisfaction and full discretion of the City.

16. Americans with Disabilities Act (ADA) Standards:

Bidders shall be required to comply with current ADA Standards in preparing their bids and executing work required under any contract resulting from this bid. Completed work must comply with current ADA Standards.

17. Warranties:

- (a) Unless otherwise specified, all workmanship, material, labor or equipment provided under the contract shall be warranted by bidder and/or manufacturer for a minimum of twelve (12) months after acceptance by City. Greater warranty protection will be accepted. Lesser warranty protection must be indicated by bidder on the bid proposal as an exception.
- (b) Bidder shall be considered primarily responsible to the City for all warranty service, parts and labor applicable to the goods or equipment provided by bidder under this bid or award, irrespective of whether bidder is an agent, broker, fabricator or manufacturer's dealer. Bidder shall be responsible for ensuring that warranty work is performed at a local agency or facility convenient to City and that services, parts and labor are available and provided to meet City's schedules and deadlines. If required and defined within the Scope of Work, the Bidder will post a performance bond after contract award to guarantee performance of these obligations. Bidder may establish a service contract with a local agency satisfactory to City to meet this obligation if bidder does not ordinarily provide warranty service.

18. Addenda:

The effect of all addenda to the bid documents shall be considered in the bid, and said addenda shall be made part of the bid documents and shall be returned with them. Before submitting a bid, each bidder shall ascertain

General Conditions



whether or not any addenda have been issued, and failure to acknowledge any such addenda may render the bid invalid and result in its rejection.

All potential bidders are responsible for monitoring the City website regarding the availability of new bid documents or addenda (where applicable). The City of Sparks will not be responsible for the results of any potential failures in automatic notification systems to potential bidders or plan holders with respect to these documents and will not adjust bid schedules or requirements due to any potential failures of those systems. It is the responsibility of all potential bidders/responders to monitor the Purchasing Division's website for any changing information prior to submitting their bid/proposal. The City of Sparks will not be responsible for the timeliness or completeness of information provided by any 3rd party bid listing or re-selling service.

19. Specifications to Prevail:

The detailed requirements of the Specifications, Scope of Work or Special Conditions shall supersede any conflicting reference in these General Conditions or the stated language on the City of Sparks Standard Purchase Order that are in conflict therewith.

20. Taxes:

The City is exempt from State, City and County Sales Taxes per NRS 372.325. The City will furnish Exemption Certificates for Federal Excise Tax when applicable. The successful bidder shall pay all taxes, levies, duties and assessments of every nature, which may be applicable to any work or materials under this Contract. The Contract Sum and any agreed variations thereof shall include all taxes imposed by law. The successful bidder shall make any and all payroll deductions required by law. The successful bidder herein indemnifies and holds the City harmless from any liability on account of any and all such taxes, levies, duties, assessments and deductions.

21. Prevailing Wages:

Bidder is responsible for complying with all applicable local, State and Federal wage laws, whether or not specifically cited in this bid document.

Per NRS Sections 338.020 through 338.090, certain projects defined as "public works" require the payment of the prevailing wage as determined by the Labor Commissioner. Generally speaking, projects/contracts for construction of a public work valued at less than \$100,000 are exempt from the prevailing wage requirement (NRS 338.080). Bidder shall be fully aware of the prevailing wage requirements of the State of Nevada as detailed in NRS Chapter 338 and price their bid response accordingly. Further information concerning Prevailing Wage rates can be found at:

https://labor.nv.gov/PrevailingWage/Public_Works_Prevailing_Wages/

Federal "Davis Bacon" wages may be applicable if the funding for the project includes Federal funds. These requirements are detailed in the "Special Conditions – Federal Requirements" section that will be included in this bid document when such conditions apply. Contractor shall compare the applicable wage rate for each classification used on the project and pay the higher of the two rates (Nevada State Prevailing Wage or Davis Bacon Wage) in each case.



22. Apprenticeship Utilization Act:

Bidder acknowledges that the Nevada Legislature has enacted state laws requiring contractors engaged in vertical or horizontal construction who employ workers on one or more public works during a calendar year to use varying levels of apprentices on such public works. *See* NRS 338.01165; SB 82 (2023). Bidder acknowledges that Senate Bill 82 (2023) places compliance and reporting requirements on contractors and subcontractors engaged in public works project, and requires contractors and subcontractors engaged in public works projects to meet annual apprentice use thresholds set by state law, including obligations to provide the Nevada Labor Commissioner with supporting documentation when requested, and an obligation to provide an annual report to the Nevada Labor Commissioner documenting its compliance with Nevada apprenticeship requirements. Bidder acknowledges and certifies that it will comply with NRS 338.01165 and SB 82 (2023), as each may be amended in the future.

23. Conflict of Interest:

No City employee or elected or appointed member of City government, or member of the employee's immediate family, may participate directly or indirectly in the procurement process pertaining to this bid if they:

- (a) Have a financial interest or other personal interest that is incompatible with the proper discharge of their official duties in the public interest or would tend to impair their independence, judgment or action in the performance of their official duties.
- (b) Are negotiating for or have an arrangement concerning prospective employment with bidder. The bidder warrants to the best of his knowledge that the submission of the bid will not create such conflict of interest. In the event such a conflict occurs, the bidder is to report it immediately to the Purchasing Manager. For breach or violation of this warranty, the City shall have the right to annul this contract without liability at its discretion, and bidder may be subject to damages and/or debarment or suspension.

24. Disqualification of Bidder:

Any one or more of the following may be considered as sufficient for the disqualification of a prospective Bidder and the rejection of the Bid:

- (a) The Bidder is not responsive or responsible.
- (b) The quality of services, materials, equipment or labor offered does not conform to the approved plans and specifications.
- (c) There is evidence of collusion among prospective Bidders (Participants in such collusion will receive no recognition as Bidders).
- (d) The Bidder lacks the correct contractor's license classification required for the defined scope of work.
- (e) Lack of competency, understanding of the scope of work, adequate machinery, plant and/or equipment as revealed in routine due diligence associated with bid evaluation.
- (f) Unsatisfactory performance record as shown by past work for the City of Sparks, judged from the standpoint of workmanship, progress, and quality of services/goods provided.
- (g) Uncompleted work which, in the judgment of the City of Sparks, might hinder or prevent the prompt completion of additional work, if awarded.
- (h) Failure to pay or satisfactorily settle all bills due for labor and/or material on any contract(s).
- (i) Failure to comply with any requirements of the City of Sparks.
- (j) Failure to list, as required, all subcontractors who will be employed by the Bidder.
- (k) Any other reason determined, in good faith, to be in the best interest of the City of Sparks.

25. Gratuities:

The City may rescind the right of the bidder to proceed under this agreement if it is found that gratuities in the form of entertainment, gifts, cash or otherwise are offered or given by the bidder, or any agent or representative

General Conditions



of the bidder, to any officer or employee of the City with the intent of influencing award of this agreement or securing favorable treatment with respect to performance of this agreement.

26. Bidder's Security (This Section ☒ IS ☐ IS NOT Applicable to this bid):

A bid deposit in an amount equal to at least 5% of the bid may be required as a bid security by the City. The bid security may only be in cash, a cashier's or certified check made payable to the City of Sparks, or a bid bond. If the bid security is a bond, it shall be executed by a surety insurer authorized to issue surety bonds in the State of Nevada. All Bonding Companies must have an "A" rating or better with Moody's or A.M. Best Company, and be included on the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bond and as Acceptable Reinsuring Companies" as published in circular 570 (as amended) by the audit staff, Bureau of Accounts, U.S. Treasury Department. (In other words, the company is T-listed.) The bid security must be executed by the bidder and enclosed with the bid proposal in the sealed bid envelope.

27. Performance and Payment Bonds:

Per NRS 339.025, before any contract, except one subject to the provisions of chapter 408 of NRS, exceeding \$100,000 for any project for the new construction, repair or reconstruction of any public building or other public work or public improvement of any contracting body is awarded to any contractor, he shall furnish to the contracting body the following bonds which become binding upon the award of the contract to the contractor (All Bonding Companies must have an "A" rating or better with Moody's or A.M. Best Company, and be included on the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bond and as Acceptable Reinsuring Companies" as published in circular 570 (as amended) by the audit staff, Bureau of Accounts, U.S. Treasury Department. (In other words, the company is T-listed.)):

Performance Bond (This Section ☒ IS ☐ IS NOT Applicable to this bid):

The Contractor awarded this bid will be required to furnish the City with a surety bond conditioned upon the faithful performance of the contract. This may take the form of a bond executed by a surety company authorized to do business in the State of Nevada and approved by the City of Sparks. The bond shall be in a sum equal to one hundred percent (100%) of the amount of the contract price. Such bond shall be forfeited to the City in the event that bidder receiving the contract shall fail or refuse to fulfill the requirements and all terms and conditions of the contract.

Payment Bond (This Section ☒ IS ☐ IS NOT Applicable to this bid):

The Contractor awarded this bid will be required to furnish the City with a payment bond. This may take the form of a bond executed by a surety company authorized to do business in the State of Nevada and approved by the City of Sparks. The bond shall be in a sum equal to one hundred percent (100%) of the amount of the contract price. The bond must be solely for the protection of claimants supplying labor or materials to the contractor to whom the contract was awarded, or to any of his subcontractors, in the prosecution of the work provided for in such contract.

28. Indemnification:

To the fullest extent permitted by law, upon award, Contractor shall hold harmless, indemnify, defend and protect City, its affiliates, officers, agents, employees, volunteers, successors and assigns ("Indemnified Parties"), and each of them from and against any and all claims, demands, causes of action, damages, costs, expenses, actual attorney's fees, losses or liabilities, in law or in equity, of every kind and nature whatsoever ("Claims") arising out of or related to any act or omission of Contractor, its employees, agents, representatives, or Subcontractors in any way related to the performance of work under this Agreement by Contractor, or to work performed by others under the direction or supervision of Contractor, including but not limited to:

General Conditions



1. Personal injury, including but not limited to bodily injury, emotional injury, sickness or disease, or death to persons;
2. Damage to property of anyone, including loss of use thereof;
3. Penalties from violation of any law or regulation caused by Contractor's action or inaction;
4. Failure of Contractor to comply with the Insurance requirements established under this Agreement;
5. Any violation by Contractor of any law or regulation in any way related to the occupational safety and health of employees.

In determining the nature of the claim against City, the incident underlying the claim shall determine the nature of the claim, notwithstanding the form of the allegations against City.

If City's personnel are involved in defending such actions, Contractor shall reimburse City for the time and costs spent by such personnel at the rate charged City for such services by private professionals.

In cases of professional service agreements, requiring professional liability coverage:

If the insurer by which a Consultant is insured against professional liability does not so defend the City and applicable agents and/or staff, and the Consultant is adjudicated to be liable by a trier of fact, the City shall be entitled to reasonable attorney's fees and costs to be paid to the City by the Consultant in an amount which is proportionate to the liability of the of the Consultant.

Nothing in this contract shall be interpreted to waive nor does the City, by entering into this contract, waive any of the provisions found in Chapter 41 of the Nevada Revised Statutes.

29. Insurance:

BIDDERS' ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW. IT IS HIGHLY RECOMMENDED THAT BIDDERS CONFER WITH THEIR RESPECTIVE INSURANCE CARRIERS OR BROKERS TO DETERMINE IN ADVANCE OF BID SUBMISSION THE AVAILABILITY OF INSURANCE CERTIFICATES AND ENDORSEMENTS AS PRESCRIBED AND PROVIDED HEREIN. IF THE APPARENT LOW BIDDER FAILS TO COMPLY STRICTLY WITH THE INSURANCE REQUIREMENTS, THAT BIDDER MAY BE DISQUALIFIED FROM AWARD OF THE CONTRACT.

The City may, unless otherwise required by law, waive or reduce the insurance requirements itemized here, at the discretion of the city's Contracts and Risk Manager.

Should work be required on City premises or within the public right-of-way, upon award of the contract, the bidder shall provide proof of insurance for the types of coverage, limits of insurance and other terms specified herein, prior to initiation of any services under City, Bid, Proposal or Contract. Coverage shall be from a company authorized to transact business in the State of Nevada and the City of Sparks and shall meet the following minimum specifications:

Contractor shall at its own expense carry and maintain at all times the following insurance coverage and limits of insurance no less than the following or the amount customarily carried by Contractor or any of its subcontractors, whichever is greater. Contractor shall also cause each subcontractor employed by Contractor to purchase and maintain insurance of the type specified herein. All insurers must have AM Best rating not less than A-VII, and be acceptable to the City. Contractor shall furnish copies of certificates of insurance

General Conditions



evidencing coverage for itself and for each subcontractor. Failure to maintain the required insurance may result in termination of this contract at City's option. If Contractor fails to maintain the insurance as set forth herein, City shall have the right, but not the obligation, to purchase said insurance at Contractor's expense.

Contractor shall provide proof of insurance for the lines of coverage, limits of insurance and other terms specified below prior to initiation of any services. Coverage shall be from a company authorized to transact business in the State of Nevada and the City of Sparks. Contractor and any of its subcontractors shall carry and maintain coverage and limits no less than the following or the amount customarily carried by Contractor or any of its subcontractors, whichever is greater.

Applicable to this Contract	Insurance Type	Minimum Limit	Insurance Certificate	Additional Insured	Waiver of Subrogation
Yes	General Liability/Umbrella (Excess) Liability	\$2,000,000	✓	✓	✓
Yes	Automobile Liability	\$1,000,000	✓	✓	
Yes	Workers' Compensation	Statutory	✓	N/A	✓
Yes	Employer's Liability	\$1,000,000	✓	N/A	
No	Professional Liability	\$1,000,000	✓	N/A	N/A
No	Pollution Legal Liability	\$1,000,000	✓	N/A	N/A

Commercial General Liability

Contractor shall carry and maintain Commercial General Liability (CGL) and, if necessary to meet required limits of insurance, commercial umbrella/excess liability insurance with a total limit of not less than the limits specified herein.

For contracts that are for the construction or improvement of public facilities, the Contractor shall obtain and maintain products and completed operations liability coverage through the statute of repose after completion of the project. Continuing commercial umbrella coverage, if any, shall include liability coverage for damage to the insured's completed work equivalent to that provided under ISO form CG 00 01.

There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from pollution, explosion, collapse, underground property damage, or damage to the named insured's work unless Subcontractor carries and maintains separate policies providing such coverage and provides Contractor evidence of insurance confirming the coverage.

Minimum Limits of Insurance

\$2,000,000 Each Occurrence Limit for bodily injury and property damage

\$2,000,000 General Aggregate Limit

\$2,000,000 Products and Completed Operations Aggregate Limit

\$10,000 Medical Expense Limit

General Conditions



If Commercial General Liability Insurance or other form with a general aggregate limit is used, it shall be revised to apply separately to this PROJECT or LOCATION.

Coverage Form

Coverage shall be at least as broad as the unmodified Insurance Services Office (ISO) Commercial General Liability (CGL) "Occurrence" form CG 00 01 04/13 or substitute form providing equivalent coverage and shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

Additional Insured

City, its officers, agents, employees, and volunteers are to be included as insureds using the applicable ISO additional insured endorsement(s) or substitute forms providing equivalent coverage, in respects to damages and defense arising from: activities performed by or on behalf of Contractor, including the insured's general supervision of Contractor; products and completed operations of Contractor; premises owned, occupied, or used by Contractor. The coverage shall contain no special limitations on the scope of protection afforded to City, its officers, employees, or volunteers. Additional insured status for City shall apply until the expiration of time within which a claimant can bring suit per applicable state law.

Primary and Non-Contributory

Contractor's insurance coverage shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to City, its officers, agents, employees, and volunteers. There shall be no endorsement or modification of the CGL to make it excess over other available insurance; alternatively, if the CGL states that it is excess or pro rata, the policy shall be endorsed to be primary with respect to the additional insured. Any insurance or self-insurance maintained by City, its officers, employees, or volunteers shall be excess of Contractor's insurance and shall not contribute with it in any way.

Waiver of Subrogation

Contractor waives all rights against City and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained pursuant to this agreement. Insurer shall endorse CGL policy as required to waive subrogation against the City with respect to any loss paid under the policy.

Endorsements

Policy forms or endorsements are required confirming coverage for all required additional insureds. The forms or endorsements for CGL shall be at least as broad as the unmodified ISO additional insured endorsement CGO 20 10 07/04 and CG 20 37 07/04 or substitute forms providing additional insured coverage for products and completed operations.

A waiver of subrogation in favor of City shall be endorsed to the policy using an unmodified Waiver of Transfer of Rights of Recovery of Others to Us ISO CG 24 04 05 09, or a substitute form providing equivalent coverage.

Electronic Data Liability

If any underground work will be performed, Contractor shall maintain electronic data liability insurance applicable to the Project and insuring against liability arising out of the loss of, loss of use of, damage to, corruption of, inability to access, or inability to manipulate electronic data. This coverage shall be maintained

General Conditions



with a limit of liability of not less than \$1,000,000 and provide coverage at least as broad as electronic data liability coverage form CG 04 37 (or substitute form providing equivalent coverage).

Railroad Protective Liability

For any construction or demolition work within fifty (50) feet of a railroad, Contractor shall maintain Railroad Protective Liability insurance on behalf of and in the name of the railroad, as named insured, with a limit of \$6,000,000 per occurrence or higher limit if required by the railroad. Contractor shall also ensure that any exclusions pertaining to the indemnification of a railroad are removed from its CGL policy or that ISO form CG 24 17 (Contractual Liability-Railroads Endorsements) is included in the coverage.

Business Automobile Liability

Minimum Limits of Insurance

\$1,000,000 Combined Single Limit per accident for bodily injury and property damage or the limit customarily carried by Contractor, whichever is greater. No aggregate limit may apply. Coverage may be combined with Excess/Umbrella Liability coverage to meet the required limit.

Coverage Form

Coverage shall be at least as broad as the unmodified Insurance Services Office (ISO) Business Automobile Coverage form CA 00 01 10/13, CA 00 25 10/13, CA 00 20 10/13 or substitute form providing equivalent coverage. Such insurance shall cover liability arising out of any auto (including owned, hired, and non-owned autos).

Pollution liability coverage at least as broad as that provided under the ISO pollution liability—broadened coverage for covered autos endorsement (CA 99 48) shall be provided, and the Motor Carrier Act endorsement (MCS 90) shall be attached for all contracts involving transportation of “hazardous material” as this term is defined by applicable law, including, but not limited to, waste, asbestos, fungi, bacteria and mold.

Additional Insured

City, its officers, agents, employees, and volunteers are to be included as insureds with respect to damages and defense arising from the ownership, maintenance or use of automobiles owned, leased, hired, or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to City, its officers, employees, or volunteers. Additional insured status for City shall apply until the expiration of time within which a claimant can bring suit per applicable state law.

Endorsements

A policy endorsement is required listing all required additional insureds. The endorsement for Business Automobile Liability shall be at least as broad as the unmodified ISO CA 20 48 10/13 or a substitute form confirming City’s insured status for Liability Coverage under the Who Is An Insured Provision contained in Section II of the coverage form ISO CA 00 01 10/13.

Waiver of Subrogation.

Contractor waives all rights against City, its officers, agents, employees, and volunteers for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained pursuant to this agreement. Contractor’s insurer shall endorse policy to waive subrogation against City with respect to any loss paid under the policy.

Workers’ Compensation and Employer’s Liability

General Conditions



Contractor shall carry and maintain workers' compensation and employer's liability insurance meeting the statutory requirements of the State of Nevada, including but not limited to NRS 616B.627 and NRS 617.210 or provide proof that compliance with the provisions of Nevada Revised Statutes Chapters 616A-D and all other related chapters is not required. It is understood and agreed that there shall be no coverage provided for Contractor or any Subcontractor of the Contractor by the City. Contractor agrees, as a precondition to the performance of any work under this Agreement and as a precondition to any obligation of the City to make any payment under this Agreement to provide City with a certificate issued by an insurer in accordance with NRS 616B.627 and with a certificate of an insurer showing coverage pursuant to NRS 617.210.

It is further understood and agreed by and between City and Contractor that Contractor shall procure, pay for and maintain the above-mentioned coverage at Contractor's sole cost and expense.

Should Contractor be self-funded for workers' compensation and employer's liability insurance, Contractor shall so notify City in writing prior to the signing of this Contract. City reserves the right to approve said retentions, and may request additional documentation, financial or otherwise, for review prior to the signing of this Contract.

Upon completion of the project, Contractor shall, if requested by City, provide a Final Certificate for itself and each Subcontractor showing that Contractor and each Subcontractor had maintained the required Workers Compensation and Employer's Liability by paying all premiums due throughout the entire course of the project.

Nevada law allows the following to reject workers' compensation coverage if they do not use employees or subcontractors in the performance of work under the contract:

- Sole proprietors (NRS 616B.627 and NRS 617.210)
- Unpaid officers of quasi-public, private or nonprofit corporations (NRS 616B.624 and NRS 617.207)
- Unpaid managers of limited liability companies (NRS 616B.624 and NRS 617.207)
- An officer or manager of a corporation or limited liability company who owns the corporation or company (NRS 616B.624 and NRS 617.207)

If a contractor has rejected workers' compensation coverage under applicable Nevada law, the contractor must indicate the basis for the rejection of coverage and complete, sign and have notarized an Affidavit of Rejection of Coverage. The Affidavit must be completed, signed and notarized prior to performance of any work.

Minimum Limits of Insurance

Workers' Compensation:	Statutory Limits
Employer's Liability:	\$1,000,000 Bodily Injury by Accident – Each Accident
	\$1,000,000 Bodily Injury by Disease – Each Employee
	\$1,000,000 Bodily Injury by Disease – Policy Limit

Coverage Form

Coverage shall be at least as broad as the unmodified National Council on Compensation Insurance (NCCI) Workers Compensation and Employer's Liability coverage form WC 00 00 07/11 or substitute form providing equivalent coverage.

OTHER INSURANCE COVERAGES (IF APPLICABLE)

General Conditions



Professional Liability Insurance (if Applicable) \$1,000,000 each claim limits of liability or whatever limit is customarily carried by the Contractor, whichever is greater, for design, design-build or any type of professional services. If coverage is required on a claims-made or claims-made and reported basis, any applicable retroactive or pending & prior litigation dates must precede the effective date of this contract. Continuous coverage shall be maintained, or an extended reporting period shall be obtained for a period of at least three (3) years following completion of the project.

Contractors Pollution Liability Insurance (If Applicable)- \$1,000,000 per occurrence and \$2,000,000 aggregate or whatever amount is acceptable to the City for any exposure to "hazardous materials" as this term is defined in applicable law, including but not limited to waste, asbestos, fungi, bacterial or mold.

Coverage shall apply to bodily injury; property damage, including loss of use of damaged property or of property that has not been physically injured; cleanup costs; and defense, including costs and expenses incurred in the investigation, defense, or settlement of claims.

City shall be included as an insured under Contractor's pollution liability insurance.

If coverage is required on a claims-made or claims-made and reported basis, any applicable retroactive or pending & prior litigation dates must precede the effective date of this contract. Continuous coverage shall be maintained, or an extended reporting period shall be obtained for a period of at least three (3) years following completion of the project.

If the scope of services as defined in this contract includes the disposal of any hazardous materials from the job site, Contractor must furnish to City evidence of pollution liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting waste under this contract. Coverage certified to the City under this section must be maintained in minimum amounts of \$1,000,000 per loss, with an annual aggregate of at least \$2,000,000.

Lower tier sub-subcontractors, Truckers, Suppliers: Evidence confirming lower tier subcontractors, truckers and suppliers are maintaining valid insurance prior to beginning work on the project to meet the requirements set forth herein on Subcontractor, including but not limited to all additional insured requirements of Subcontractor.

ALL COVERAGES

Coverage shall not be suspended, voided, canceled, or non-renewed by either CONTRACTOR or by the insurer, reduced in coverage or in limits except after thirty (30) days' prior written notice has been given to CITY except for ten (10) days' notice for nonpayment of premium.

DEDUCTIBLES AND RETENTIONS

Any deductibles or self-insured retentions that exceed \$100,000.00 per occurrence or claim must be declared to and approved by the City's Contracts and Risk Manager and prior to signing this Contract. City is entitled to request and receive additional documentation, financial or otherwise, prior to giving its approval of the deductibles and self-insured retentions. Any changes to the deductibles or self-insured retentions made during the term of this Contract or during the term of any policy must be approved by City's Contracts and Purchasing Manager prior to the change taking effect. Contractor is responsible for any losses within deductibles or self-insured retentions.

OTHER INSURANCE PROVISIONS

General Conditions



Should City and Contractor agree that higher coverage limits are needed warranting a project policy, project coverage shall be purchased and the premium for limits exceeding the above amount may be borne by City. City retains the option to purchase project insurance through Contractor's insurer or its own source.

Any failure to comply with reporting provisions of the policies shall not affect coverage provided to City, its officers, agents, employees, or volunteers.

ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers with a Best's rating of no less than A-VII and acceptable to the City. City, with the approval of the Risk Manager, may accept coverage with carriers having lower Best's ratings upon review of financial information concerning Contractor and insurance carrier. City reserves the right to require that Contractor's insurer be a licensed and admitted insurer in the State of Nevada, or meet any applicable state and federal laws and regulations for non-admitted insurance placement.

VERIFICATION OF COVERAGE

Contractor shall furnish City with certificates of insurance and with original endorsements affecting coverage required by this contract. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

Prior to the start of any Work, Contractor must provide the following documents to City of Sparks, Attention: Purchasing Division, P.O. Box 857, Sparks, NV 89432-0857:

- A. Certificate of Insurance.** Contractor must provide a Certificate of Insurance form to the City of Sparks to evidence the insurance policies and coverage required of Contractor.
- B. Additional Insured Endorsements.** An original Additional Insured Endorsement, signed by an authorized insurance company representative, must be submitted to the City of Sparks, by attachment to the Certificate of Insurance, to evidence the endorsement of the City of Sparks as additional insured.
- C. Policy Cancellation Endorsement.** Except for ten (10) days' notice for non-payment of premium, each insurance policy shall be endorsed to specify that without thirty (30) days prior written notice to the City of Sparks, the policy shall not be suspended, voided, cancelled or non-renewed, and shall provide that notices required by this paragraph shall be sent by certified mailed to the address specified above. A copy of this signed endorsement must be attached to the Certificate of Insurance. If endorsements are not available, Contractor shall be responsible to provide prior written notice to City as soon as practicable upon receipt of any notice of cancellation, non-renewal, reduction in required limits or other material change in the insurance required under this Agreement.
- D. Bonds (as Applicable).** Bonds as required and/or defined in the original bid documents.

All certificates and endorsements are to be addressed to the City of Sparks, Purchasing Division and be received and approved by City before work commences. The City reserves the right to require complete certified copies of all required insurance policies at any time.

SUBCONTRACTORS

General Conditions



Contractor shall include all Subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each Subcontractor. All coverages for Subcontractors shall be subject to all the requirements stated herein.

MISCELLANEOUS CONDITIONS

1. Contractor shall be responsible for and remedy all damage or loss to any property, including property of City, caused in whole or in part by Contractor, any Subcontractor, or anyone employed, directed, or supervised by Contractor.
2. Nothing herein contained shall be construed as limiting in any way the extent to which Contractor may be held responsible for payment of damages to persons or property resulting from its operations or the operations of any Subcontractors under it, and such coverage and limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to City in this contract.
3. In addition to any other remedies City may have if Contractor fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, City may, at its sole option:
 - a. Purchase such insurance to cover any risk for which City may be liable through the operations of Contractor under this Agreement and deduct or retain the amount of the premiums for such insurance from any sums due under the Agreement;
 - b. Order Contractor to stop work under this Agreement and/or withhold any payments which become due Contractor here under until Contractor demonstrates compliance with the requirements hereof; or,
 - c. Terminate the Agreement.
4. If Contractor's liability policies do not contain the standard ISO separation of insureds condition, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

30. Safety Program:

Upon award, the Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work. The Contractor shall take all necessary precautions for the safety of, and shall provide all necessary protection to prevent damage, injury, or loss to:

1. All employees on the work site and all other persons who may be affected thereby.
2. All the work, materials, and equipment to be incorporated therein, whether in storage on or off the site.
3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

Contractor shall comply with all applicable laws, ordinances, rules, regulations, and others of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss. He shall erect and maintain, as required by existing conditions and progress on the work, all necessary safeguards for safety and protection, including posting danger signs, other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent utilities. Contractor shall comply with OSHA'S Hazard Communication Standards.

Contractor shall designate a responsible member of its organization at the site whose duty shall be the prevention of accidents. This person shall be Contractor's superintendent unless otherwise designated in writing by Contractor to the Owner and the Engineer.



31. Award of Contract:

- (a) Bids/Proposals will be analyzed and award will be made to the lowest, responsive and responsible bidder whose bid conforms to the solicitation and whose bid is considered to be most advantageous to the City, price and other factors considered. Factors to be considered may include, but are not limited to: bidder's past performance, total unit cost, economic cost analysis, life cycle costs, warranty and quality, maintenance cost, durability, the operational requirements of the City and any other factors which will result in the optimum economic benefit to the City.
- (b) The City reserves the right to reject any item or items, to waive informalities, technical defects and minor irregularities in bids/proposals received; and to select the bid(s) or proposal(s) deemed most advantageous to the City. Should the City elect to waive a right it will not constitute an automatic waiver of that right in the future nor will it impact any other right or remedy. The City may consider bids/proposals submitted on an "all or nothing" basis if the bid/proposal is clearly designated as such.
- (c) The City reserves the right to award one or more contracts on the bids/proposals submitted, either by award of all items to one bidder or by award of separate items or groups of items to various bidders as the interests of the City may require, unless the bidder clearly specifies otherwise in his bid.
- (d) Upon acceptance by the City of Sparks, the solicitation, bid, proposal, or price quotation and issuance of a purchase order issued to the successful bidder shall be deemed to result in a binding contract incorporating those terms and these General Conditions without further action required by either party. Items are to be furnished as described in the bid and in strict conformity with all instructions, conditions, specifications, and provisions in the complete contract, as defined by this clause or any related integrated agreement.

32. Request for Proposal (RFP) Submittals:

In the case of Request for Proposals (RFP's), it should be noted that the documents submitted by prospective bidders are competitive sealed proposals and not competitive sealed bids. When proposals are opened, prices and other information will not be made public until the proposal is awarded. There shall be no disclosure of any bidder's information to competing bidders prior to the award of the proposal.

By their nature, proposals will include a number of variables that will vary based on the complexity of the product or service addressed within the proposal. Therefore, the evaluation of RFP's and the recommendation for award will not be based on price alone. Selection criteria will be better defined for each scope of work in the Special Conditions section of this bid.

Upon award of the contract, the executed contract and proposals will become public information. Accordingly, each proposal should be submitted on the vendor's most favorable terms from a price and technical standpoint.

33. Bidder Preference Law (This Section ☒ IS ☐ IS NOT Applicable to this bid):

This project will be bid and awarded under the Provisions(s) of NRS 338.147, which restricts preference given to certain contractors on Public Works Projects. The NRS cited in this section is meant to be a reference only. Each bidder shall acquaint himself with the latest provisions of NRS 338.147.

If the Contract for any Public Works Construction Project is expected to cost \$250,000 or more, then all Contractors wishing to receive benefit of their preference status in the evaluation of bids must submit a copy of their Certificate of Bidder Preference issued by the State Contractor's Board. (Call 775-688-1141 or 775-486-1100 to obtain certification information from the State Contractors Board). Contractors who do not submit a preference certificate at the time of their bid are presumed to have wished not to exercise the benefit of their preference, or do not possess the certificate of eligibility.

General Conditions



To the extent Contractor has sought, qualified and receives a bidding preference on this project, pursuant to Nevada Revised Statutes Chapter 338, Contractor acknowledges and agrees that the following requirements will be adhered to, documented and attained for the duration of the Project:

1. At least 50 percent of the workers employed on the Project (including subcontractors) hold a valid driver's license or identification card issued by the Nevada Department of Motor Vehicles;
2. All vehicles used primarily for the public work will be (a) registered and (where applicable) partially apportioned to Nevada; or (b) registered in Nevada; and
3. The Contractor shall maintain and make available for inspection within Nevada all payroll records related to the Project.

Contractor recognizes and accepts that failure to comply with any requirements herein shall be a material breach of the contract and entitle the City of Sparks to liquidated damages in the amount set by statute. In addition, the Contractor recognizes and accepts that failure to comply with any requirements herein may lose its certification for a preference in bidding and/or its ability to bid on any contracts for public works pursuant to NRS Chapter 338.

To the extent Contractor has sought, qualified and receives a bidding preference, and this project has a value of over \$250,000 pursuant to Nevada Revised Statutes Chapter 338, each contract between the contractor, applicant or design-build team and a subcontractor must provide for the apportionment of liquidated damages assessed pursuant to this section if a person other than the Contractor was responsible for the breach of a contract for a public work caused by a failure to comply with a requirement of Items 1-3 within this section. The apportionment of liquidated damages must be in proportion to the responsibility of each party for the breach.

This section shall not be applicable for projects in which some or all of the funding comes from Federal sources.

34. Tie Bids:

Should identical low, responsive and responsible bids be received from two bidders, the City of Sparks Purchasing Manager shall notify all parties involved in the tie and may at his option utilize a coin-flip to determine the low bidder who shall be recommended for award. Or;

Should there be three or more low, responsive and responsible tie bids the Purchasing Manager shall exercise the following tie breaking method, unless another alternative is apparent and prudent: The City of Sparks Purchasing Manager shall set a mutually agreed upon time where, in his office, he shall shuffle a new deck of playing cards and have each bidder's representative cut the cards. The tie bidder who cuts the highest card (with Ace high) shall be recommended for bid award.

35. Appeals/Protests – Bids Only (Not Applicable to Request for Proposals):

A person who submits a bid on a contract may, after the bids are opened and within 5 business days after the date the "Recommendation to Award" is issued by the City, unless otherwise stated in the Special Conditions, file a notice of protest regarding the awarding of the contract. The City's "Recommendation to Award" will be dated and posted on the City's public website within the area where bid notices and bid re-caps are posted (Currently: <http://www.cityofsparks.us/bids>).

General Conditions



- (a) A notice of protest must include a written statement setting forth with specificity the reasons the person filing the notice believes the applicable provisions of law were violated.
- (b) A person filing a notice of protest may be required by the governing body or its authorized representative, at the time the notice of protest is filed, to post a bond with a good and solvent surety authorized to do business in this State or submit other security, in a form approved by the governing body or its authorized representative, to the governing body or its authorized representative who shall hold the bond or other security until a determination is made on the protest. A bond posted or other security submitted with a notice of protest must be in an amount equal to the lesser of:
 - (1) Twenty-five percent of the total value of the bid submitted by the person filing the notice of protest; or
 - (2) Two hundred fifty thousand dollars (\$250,000).
- (c) A notice of protest filed in accordance with the provisions of this section operates as a stay of action in relation to the awarding of any contract until a determination is made by the governing body or its authorized representative on the protest.
- (d) A person who submits an unsuccessful bid may not seek any type of judicial intervention until the governing body or its authorized representative has made a determination on the protest and awarded the contract.
- (e) A governing body or its authorized representative is not liable for any costs, expenses, attorney's fees, loss of income or other damages sustained by a person who submits a bid, whether or not the person files a notice of protest pursuant to this section.
- (f) If the protest is upheld, the bond posted or other security submitted with the notice of protest must be returned to the person who posted the bond or submitted the security. If the protest is rejected, a claim may be made against the bond or other security by the governing body or its authorized representative in an amount equal to the expenses incurred by the governing body or its authorized representative because of the unsuccessful protest. Any money remaining after the claim has been satisfied must be returned to the person who posted the bond or submitted the security.

36. Documentation:

Due to the time constraints that affect contract performance, all required documents, certificates of insurance and bonds shall be provided to the City within ten (10) calendar days following award or date of request by City, whichever is later. Any failure to comply may result in bid being declared non-responsive and rejected, and at City's option, the bid bond may be attached for damages suffered.

37. Discounts:

- (a) Prompt payment discounts will not be considered in evaluating bids for award. However, offered discounts will be taken if payment is made within the discount period, even though not considered in the evaluation of bids.
- (b) In connection with any discount offered, time will be computed from date of delivery and acceptance, or invoice receipt, whichever is later. Payment is deemed to be made for the purpose of earning the discount on the date of mailing of the City check.
- (c) Any discount offered other than for prompt payment should be included in the net price quoted and not included in separate terms. In the event this is not done, the City reserves the right to accept the discount offered and adjust prices accordingly on the Purchase Order.

38. Seller's Invoice:

General Conditions



Invoices shall be prepared and submitted in duplicate to the address shown on the Purchase Order. Separate invoices are required for each Purchase Order. Invoices shall contain the following information: Purchase Order number, item number, description of supplies or services, sizes, unit of measure, quantity, unit price and extended totals.

39. Inspection and Acceptance:

Inspection and acceptance will be at destination unless specified otherwise, and will be made by the City department shown in the shipping address or other duly authorized representative of the City. Until delivery and acceptance, and after any rejection, risk of loss will be on the bidder unless loss results from negligence of the City.

40. Lost and Damaged Shipments:

Risk of loss or damage to items prior to the time of their receipt and acceptance by the City is upon the bidder. The City has no obligation to accept damaged shipments and reserves the right to return at the bidder's expense damaged merchandise even though the damage was not apparent or discovered until after receipt of the items.

41. Late Shipments:

Bidder is responsible to notify the City department receiving the items and the Purchasing Manager of any late or delayed shipments. The City reserves the right to cancel all or any part of an order if the shipment is not made as promised.

42. Document Ownership:

All technical documents and records originated or prepared pursuant to this contract, including papers, reports, charts, and computer programs, shall be delivered to and become the exclusive property of the City and may be copyrighted by the City. Bidder assigns all copyrights to City by undertaking this agreement.

43. Advertisements, Product Endorsements:

City employees and agencies or organizations funded by the City of Sparks are prohibited from making endorsements, either implied or direct, of commercial products or services without written approval of the City Manager. No bidder may represent that the City of Sparks has endorsed their product or service without prior written approval.

44. Vendor Workplace Policies

No Vendor providing a service, program or activity to the public on behalf of the City shall discriminate against any person because of sex, race, color, creed, national origin or disability. Vendor, if providing a service, program or activity to the public on behalf of the City, shall comply with the Americans with Disability Act and City's policies pursuant thereto when providing said service, program or activity.

The City of Sparks is an Affirmative Action/Equal Opportunity Employer. Bidders shall be cognizant of the requirements for compliance with Executive Order 11246, entitled "Equal Employment Opportunity" as amended by Executive Order 11375 and as supplemented in regulations of the U.S. Department of Labor (41 CFR part 60).

45. Business License Requirement:

All companies doing business with, or within, the City of Sparks are required to obtain and maintain a current business license from the City of Sparks prior to the commencement of work per Sparks Municipal Code Section 5.08.020A. Bidder(s) awarded a contract resulting from this bid shall be required to obtain a current business license if they do not already possess one.



46. City Provisions to Prevail:

Except as indicated in the specifications, the City's standard General Conditions shall govern any contract award. Any standard terms and conditions of bidder submitted by bidder shall not be acceptable to City unless expressly agreed to by the City. The City reserves the right to reject bidder's bid as non-responsive, to consider the bid without bidder's standard terms and conditions, or to require bidder to delete reference to such, as a condition of evaluation or award of the bid. If, after award of contract, bidder (contract vendor) provides materials or services accompanied by new or additional standard terms or conditions, they too shall be considered void and City may require deletion as a further condition of performance by vendor.

47. Invalid Provisions:

In the event that any one or more of the provisions of this agreement shall be found to be invalid, illegal or unenforceable, the remaining provisions shall remain in effect and be enforceable.

48. Amendments and Modifications:

The Purchasing Manager may at any time, by written order, and without notice to the sureties, make a modification to the contract or an amendment to the Purchase Order, within the general scope of this contract, in (1) quantity of materials or service, whether more or less; (2) drawings, designs, or specifications, where the supplies to be furnished are to be specially manufactured for the City; (3) method of shipment or packing; and (4) place of delivery. If any such change causes an increase or decrease in the cost or the time required for the performance of this contract, an equitable adjustment shall be made by written modification of the contract or amendment to the Purchase Order. Any claim by the bidder for adjustment under this clause must be asserted within 30 calendar days from the notification date.

49. Assignment:

Vendor shall not assign or delegate duties or responsibilities under this agreement, in whole or in part, without prior written approval of the City.

50. Disputes After Award:

Except as otherwise provided in these provisions, any dispute concerning a question of fact arising under this contract which is not disposed of by agreement shall be decided by the Purchasing Manager, who shall reduce this decision to writing and mail a copy to the bidder. The decision of the Purchasing Manager shall be final and conclusive, unless bidder requests arbitration within ten (10) calendar days. Pending final decision of a dispute, the bidder shall proceed diligently with the performance of the contract and in accordance with the Purchasing Manager's decision.

51. Arbitration after Award:

Any and all disputes, controversies or claims arising under or in connection with the contract resulting from this bid, including without limitation, fraud in the inducement of this Contract, or the general validity or enforceability of this Contract, shall be governed by the laws of the State of Nevada without giving effect to conflicts of law principles, may be submitted to binding arbitration before one arbitrator, and shall be conducted in accordance with the Commercial Arbitration Rules of the American Arbitration Association in a private manner in Washoe County, Nevada. This award shall be final and judgment may be entered upon it in any court having jurisdiction thereof. In reaching this final award, the arbitrator shall have no authority to change or modify any provision of this Contract. All other expenses of arbitration shall be borne equally by the parties. All fees, including legal fees, shall be borne by the party who incurred them. All costs of enforcement shall be borne by the losing party. Each party shall have the right to discovery in accordance with the Nevada Rules of Civil Procedure.



52. Lawful Performance:

Vendor shall abide by all Federal, State and Local Laws, Ordinances, Regulations, and Statutes as may be related to the performance of duties under this agreement. In addition, all applicable permits and licenses required shall be obtained by the vendor, at vendor's sole expense.

53. Annual Appropriation of Funds:

Multi-year term supply and service contracts and leases are subject to annual appropriation of funds by the City Council. The City plans and makes appropriations to the City Budget with respect to a fiscal year that starts July 1st and ends June 30th of each year. Payments made under term contracts and leases are considered items of current expense. Purchase Orders are funded when issued; therefore, they are current expense items and are not subject to any subsequent appropriation of funds.

Continuance of a multi-year contract beyond the limits of funds available shall be contingent upon appropriation of the requisite funds in the ensuing fiscal year and the termination of this contract due to lack of appropriation shall be without penalty.

54. Extension:

When in the City's best interest, this agreement may be extended on a daily, month-to-month, or annual basis by mutual agreement of both parties. Services and/or materials received under an extension shall be in accordance with pricing, terms, and conditions, as described herein.

55. Termination:

The City may terminate this agreement and be relieved of any consideration to the vendor should vendor fail to perform in the manner required. Furthermore, the City may terminate this agreement for any reason without penalty upon giving thirty (30) days written notice to the vendor. In the event of termination, the full extent of City liability shall be limited to an equitable adjustment and payment for materials and/or services authorized by and received to the satisfaction of the City prior to termination.

56. Venue:

This agreement shall be governed by and interpreted according to the laws of the State of Nevada, and venue for any proceeding shall be in Washoe County.

Special Conditions and Specifications (Specific to Project)

In instances where the Special Conditions conflict with the General Conditions, the Special Conditions will prevail with respect to that instance or item(s).

SPECIAL PROVISIONS
SANITARY SEWER IMPROVEMENTS PROJECT-McCARRAN BLVD & PRATER WAY
BID #24/25-012, PWP# WA-2025-205

These Special Provisions supplement and modify the "Standard Specifications for Public Works Construction" (Orange Book), 2012 Edition, and adopted by the City of Sparks, Nevada. All of the requirements and provisions of said Standard Specifications shall apply except where modified by the City General Conditions, contract forms, plans, technical specifications and these Special Provisions (all contained within this bid document).

SECTION 1: SCOPE OF WORK

The work performed under this contract consists of but is not limited to: placement of a new sewer mainline and manhole structure, including modification of an existing structure. Removal of asbestos waterline, including proper disposal; asphalt patching, mill and overlay, including placement of NDOT Open Grade, striping and traffic control. For use in determining proper prevailing wage rates, the project is approximately 5.7 miles from the City of Reno Court House.

SECTION 2: SPECIAL PROVISIONS

The requirements set forth in these "Special Provisions" shall be used in addition to those set forth in "Standard Specifications for Public Works Construction".

SECTION 3: STANDARD SPECIFICATIONS

All materials furnished and work performed within the City of Sparks Right-of-Way shall be done in accordance with the 2012 version of the "Standard Specifications for Public Works Construction" (Orange Book) and any revisions thereto if not covered or amended by the Special Provisions. The "Standard Specifications for Public Works Construction" are herein referred to as "Standard Specifications". All work done with Nevada Department of Transportation (NDOT) Right-of-Way shall be done in accordance with Standard Specifications for Road and Bridge Construction, latest version.

SECTION 4: STANDARD DETAILS

All materials furnished and work performed within the City of Sparks Right-of-Way shall be done in accordance with the most current edition of the City of Sparks "Standard Details" located on the City's website. For any work not specifically covered by the City's "Standard Details", the contractor shall refer to the "Standard Details for Public Works Construction" (Orange Book), and any revisions thereto if not covered or amended by the Special Provisions. All work done with Nevada Department of Transportation (NDOT) Right-of-Way shall be done in accordance with Standard Specifications for Road and Bridge Construction, latest version.

SECTION 5: NOTICE TO PROCEED AND TIME SCHEDULE

An official "Notice to Proceed" specifying the date by which construction operations shall be started will be issued in writing and delivered to the CONTRACTOR by the City at the Pre-construction Meeting. Contract time will begin on the date specified in the "Notice to Proceed", unless operations begin at an earlier date, in which case the date that such operations begin will apply. The CONTRACTOR shall immediately begin and diligently prosecute the work to completion. The CONTRACTOR shall obligate himself to complete the work within the stated time limits. All work described in this document shall be completed within six (6) consecutive marathon weekends, excluding holidays or special events. A marathon weekend will consist of starting no earlier than Friday at 8:00 P.M. to Monday at 5 A.M or any portion thereof. **All paving shall be completed no later than September 14, 2025. All work shall complete no later than October 5, 2025.**

SECTION 6: LIQUIDATED DAMAGES

In case all work called for under the contract is not completed before or upon the expiration of the time limits set forth above, it is agreed by the parties to the contract that damage will be sustained by the City and that it will be impracticable to determine accurately the actual damage the City will sustain in the event of any such delay. Therefore, the CONTRACTOR shall pay to the City:

- ONE THOUSAND DOLLARS (\$1,000.00) for each and every working day delay after the sixth (6) marathon weekend completion time limit or every working day delay after the established paving completion date of **September 14, 2025, or the project completion date of October 5, 2025.**

In finishing the work in excess of the dates prescribed and the City shall further have the right to charge to the CONTRACTOR, his heirs, assigns or sureties and to deduct from the final payment for the work, all or any part as it may deem proper of the actual cost of which are directly chargeable to the contract and which accrue during the period of such extensions, except that the cost of the final surveys and preparation of final estimate shall not be included in such charges.

The City may deduct this amount from any money due or that may become due the CONTRACTOR under the contract. This payment shall not be considered as a penalty, but as liquidated damages suffered by the City on account of the failure of the CONTRACTOR to complete the work within the time limit of the contract.

SECTION 7: EXCUSABLE DELAYS

The CONTRACTOR shall not be assessed with liquidated damage nor the cost of engineering inspection during any delay in the completion of the work caused by acts of God, the public enemy, fire, floods, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather, or due to such causes, provided that the CONTRACTOR shall within ten (10) days from the beginning of such delay notify the Project Manager in writing of the causes of delay. The Project Manager's findings of the facts thereon shall be final and conclusive.

SECTION 8: INTENT OF THE PLANS AND SPECIFICATIONS

The intent of the plans and specifications is to prescribe a complete outline of work, which the CONTRACTOR undertakes to do in full compliance with the contract.

The CONTRACTOR shall furnish all required materials, equipment, tools, labor and incidentals, unless otherwise provided in the contract and shall include the cost of these items in the contract unit prices for the several units of work. All items of work called for on the plans or in the specifications and not included as a separate item in the proposal shall be considered as incidental to the other items listed in the proposal and the payment for such incidental items shall be considered as included in the contract unit prices bid.

SECTION 9: AUTHORITY OF THE PROJECT MANAGER AND INSPECTOR

All work shall be done under the supervision of the Project Manager acting on behalf of the City. He shall decide all questions that arise as to the quality and acceptability of materials furnished, work performed, manner of performance, rates of progress, interpretation of the plans and specifications, acceptable fulfillment of the contract and compensation under the specifications. He shall determine the amount of work performed and materials furnished, and his decision and estimate shall be final. His estimate shall be "condition precedent" to the right of the CONTRACTOR to receive money due him under the contract. The Project Manager does not have authority to authorize changes in plans and specifications without prior written approval of the Director of Community Services.

The City shall provide an inspector who will represent the City and the Engineer and shall make inspections of all work, sample and test materials and do such other work relative to supervision of the project as he may be assigned by the City. All instructions given by the inspector are subject to approval by the Engineer.

SECTION 10: CHANGE ORDERS

The City of Sparks reserves the right to make alterations or supplements to the Contract. Change Order Forms are required for all changes in decreases and/or increases of quantities and/or dollar amount changes in accordance with the "Standard Specifications".

SECTION 11: COOPERATION WITH OTHER CONTRACTORS

The CONTRACTOR shall cooperate with other CONTRACTOR's who may be employed by the City on construction of other work adjacent to or in the proximity of the location of the project.

SECTION 12: DISPOSAL OF EXCESS AND WASTE MATERIALS

Trash, construction debris, cleared vegetation, excavated material unsuitable to be incorporated in the construction shall become the property of the CONTRACTOR and shall be removed by the CONTRACTOR and shall be legally disposed of offsite in accordance with all federal, state and local regulations. All street grindings and pulverized material that will be exported will become the property of the CONTRACTOR. Hauling and disposal will be at the contractor's expense.

SECTION 13: LIMITS OF CONTRACTOR'S OPERATIONS

If the CONTRACTOR's operations result in damage to any publicly or privately owned facilities outside the limitations of the construction easement, the CONTRACTOR shall, at his expense, repair such damage or indemnify the owner of the damaged property.

If the CONTRACTOR negotiates with property owners for the use of land for construction operations outside the limits of the construction easements, he shall do so at his own risk and the City will assume no liability for such use of private property. All agreements between the CONTRACTOR and private property owners shall be in writing and the City will be furnished copies of such agreements.

At no time will the CONTRACTOR be allowed to store debris or materials on the street overnight. All asphalt, concrete, soil and aggregate base will be hauled off at the conclusion of each working day. Materials for installation of Drop Inlets (Pipe, boxes frame and cover) will be allowed to be stored onsite with the approval of the Project Manager or inspector.

SECTION 14: PROTECTION OF EXISTING UTILITIES

The location of existing utilities and drain lines shown on the plans are not guaranteed but indicates generally their location according to the best knowledge of the Project Manager. The CONTRACTOR shall notify Underground Services Alert (USA Dig) at 1-800-227-2600, and NV Energy, Truckee Meadows Water Authority (TMWA), Charter Communications and other cable companies not less than five (5) working days prior to the start of construction to verify the location and depths of utilities.

The CONTRACTOR shall take inventory of the exact location of all vaults, boxes, conduits, ducts, cables, pipe systems, etc. and shall protect said utilities. Any damage caused by operation of the CONTRACTOR shall be repaired by the CONTRACTOR at his own expense. It shall be the CONTRACTOR's responsibility to contact the impacted utility for any replacement hardware.

The CONTRACTOR shall submit the utility inventory to the Project Manager and the utility companies upon the completion of utility lowering activities. The CONTRACTOR shall also keep a copy of the utility location inventory list on the project work site at all times for emergency shutoff purposes.

SECTION 15: CONTRACT AMOUNT

The total amount payable under this contract shall be determined by the sum of the amounts earned and the various quantities of repairs actually made and determined from unit prices as furnished by the CONTRACTOR in the schedule of prices contained in his proposal. The various quantities of repairs in the bid proposal are estimates and the City of Sparks reserves the right to vary quantities as may be necessary.

SECTION 16: PRECONSTRUCTION CONFERENCE

After the execution of the contract, but prior to the commencement of any work, a preconstruction conference between the CONTRACTOR and the City of Sparks will be held at a mutually acceptable time and place.

SECTION 17: MEASUREMENT FOR PAYMENT

Whenever possible, the actual quantities installed, or work performed on any project shall be measured on the site of the work by a crew composed of both the CONTRACTOR and the Project Manager or Inspector. This combined crew shall record all measured quantities in field notebooks, in legible and understandable entries. The CONTRACTOR and the Department shall each have a set of field notes which are to be in agreement on all quantities and items measured and shall include all work accomplished on the project under contract. Each set of field measurements shall be initialed and dated by responsible representatives of the CONTRACTOR and the Project Manager or Inspector participating on the combined crew. In the event that it is not possible to form a combined crew for the measurements, the area repaired shall be measured by the Project Manager or Inspector.

SECTION 18: SURFACE MOUNTED UTILITY ADJUSTMENT

It shall be the CONTRACTOR's responsibility to adjust all surface mounted utility appurtenances, such as manholes, survey monument covers and valve boxes to grade consistent with the grade of the restored street surface. CONTRACTOR shall coordinate with the utility owner prior to paving to schedule a leak detection and/or valve inspection.

SECTION 19: PRE/POST-CONSTRUCTION WALK-THRU

The CONTRACTOR, Inspector, and/or City Project Coordinator shall conduct a pre and post construction walk-thru. This shall be accomplished to determine limits of construction and existing conditions at each site and the surrounding area. The CONTRACTOR should walk the site and note all existing conditions. Concrete pavers, mow strips, fencing, edging, sprinklers block and brick walls, etc. are within this area. Any damage and finish back to these landscapes will be included within the scope of work and no additional pay item will be allowed for this work.

The CONTRACTOR will be required to video tape the entire project prior to any construction including all effected properties and staging locations. This video media will be in a DVD format and a copy of the DVD will be provided to the City. Areas near the property lines, back of sidewalk and driveways, landscaping, mow strips, fences and edging should be videoed in great detail to avoid any damage or disputes with property owners. The CONTRACTOR will be required to replace and or repair all areas that damaged by construction activities. Areas that are in question or concern should be noted on the video and the CONTRACTOR should notify the City Project Coordinator or inspector.

SECTION 20: WORKING DAY, WORK HOURS, SATURDAY, SUNDAY, HOLIDAY AND OVERTIME WORK

All work described in this document shall be completed on consecutive marathon weekends, excluding holidays or special events. A marathon weekend will consist of starting no earlier than Friday at 8:00 P.M. to Monday at 5 A.M or any portion thereof. Start time and completion time will include set-up and removal of traffic control devices.

The City of Spark recognizes the following legal Holidays:

January 1	New Year's Day
3 rd Monday in January	Martin Luther King, Jr. Birthday
3 rd Monday in February	President's Day
Last Monday in May	Memorial Day
3 rd Monday in June	Juneteenth
July 4	Independence Day
1 st Monday in September	Labor Day
Last Friday in October	Nevada Day
November 11	Veteran's Day
4 th Thursday in November	Thanksgiving Day
4 th Friday in November	Family Day (day after Thanksgiving)
December 25	Christmas Day

The City of Sparks is aware of the following special events which may require a project "shut down" during the anticipated duration of this project:

July 4 thru 6	Independence Day Weekend
August 1 st thru 10th	Hot August Nights
August 27 thru September 1	Nugget Rib Cook Off
September 5 thru 7	Reno Balloon Races
September 25 thru 27	Street Vibrations

****This may not be a complete list of anticipated special events. Project shut down shall be at the discretion of the City of Sparks and/or the Nevada Department of Transportation****

SECTION 21: MATERIAL SUBMITTALS

Submittals for the following items shall be provided at the time of the preconstruction meeting and shall have been performed within the previous 12 months. Two (2) copies of each submittal should be submitted.

- Backfill Materials – Pipe bedding, Aggregate Base, Drain Rock, Class E
- Geotextile Separation Fabric
- ASTM F679 PS 46 Sanitary Sewer Pipe, and appurtenances
- Manhole Rings, Covers, joint wrap, and appurtenances
- Cellular Concrete
- Type II Class B Aggregate Base
- Portland Cement Concrete Mix Design
- Asphalt Mix Designs – Type 2C, Open Grade
- Concrete Curing Compound
- Pavement Markings
- Bypass pumping plan

SECTION 22: TRAFFIC CONTROL PLANS

All traffic control shall conform to the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) and as directed by the City of Sparks Community Services Department.

The CONTRACTOR shall designate a Traffic Control Supervisor (TCS), certified by the American Traffic Safety Services Association (ATSSA), who shall be responsible for planning, initiating, installing and maintaining all traffic control devices, as shown on the traffic control plan, as specified in the MUTCD and these specifications. The designated construction TCS shall be available to be contacted twenty-four (24) hours a day, seven (7) days a week, for the life of this Contract.

The traffic control plan shall be scaled such that all proposed signage and traffic control for all streets in the entire unit can be seen on one full size (24" x 36") plan sheet. The CONTRACTOR shall submit two (2) copies of proposed traffic control plan to the Project Manager for review and comments five (5) working days prior to the pre-construction meeting. The proposed traffic control plan shall be prepared and signed by a certified TCS, retained by the CONTRACTOR.

The CONTRACTOR's traffic control plan shall include, but not be limited to, the following:

- Proposed construction zone and existing speed limits
- All construction signing
- Message board locations
- Location of flaggers
- Types and locations of traffic control devices
- Temporary lane striping
- Construction phasing
- Lane crossovers between construction phases
- Method for maintaining traffic signal functions
- Special events accommodations
- Detours
- Accommodations for pedestrian, bicycle, and transit facilities

If, during construction, revisions to the accepted plan is necessary for safety or accommodation to traffic, these changes must be prepared by the ATSSA certified, Traffic Control Supervisor.

The Project Manager may authorize a suspension of work during unfavorable weather or other conditions beyond the control of the CONTRACTOR. During such a suspension, the CONTRACTOR shall make passable and shall open to traffic such portions of the project under improvement and such temporary roadways or portions thereof as may be agreed upon between the CONTRACTOR and the Project Manager for the accommodation of necessary traffic during the period of suspension. The maintenance of the temporary route, replacement or renewal of any work or materials lost or damaged, removal of any work or materials and temporary maintenance shall be at the expense of the CONTRACTOR.

Existing roadways will only be allowed to be closed to thru traffic only. Access to properties must be maintained at all times for the duration of the project. Flaggers will be required if the Project Manager believes it is needed due to current activity or traffic safety. Failure to comply with Flagger requirements will result in an immediate shut down of all construction activity. Work will resume when the flagger requirement has been satisfied.

City of Sparks has begun the NDOT Encroachment Permit Process. The contractor shall be responsible for providing a traffic control plan that will be submitted to NDOT for review and approval prior to issuing the NDOT Encroachment permit. The contractor will be responsible for initial submittal and any required changes required by NDOT to provide an approved traffic control plan. Submittals shall be provided to the Project Manager.

During non-working hours any hazardous section of the work shall be outlined with markers and flares. If deemed necessary by the Project Manager, barricades shall be erected to protect public traffic or he may direct the CONTRACTOR to furnish flagger(s) and pilot cars. Such markers, flares, barricades, flagging or piloting shall be at the expense of the CONTRACTOR.

When the CONTRACTOR's hauling equipment is required to merge with cross traffic and at such other points which may be necessary to maintain safe traffic conditions, flaggers shall be provided to each side of the impairment to stop and direct traffic.

In case of damage to detours due to storms or other causes, the CONTRACTOR shall at once repair the damage, provide other detours or provide for carrying traffic through construction operations. Water shall be applied at points and in amounts as directed by the Project Manager, to keep the roadbed firm, smooth, stable and to reduce the dust hazard to a minimum.

Construction Zone Signs shall be placed on all cross streets where traffic is to be maintained. They shall be placed a sufficient distance from the construction to give motorists adequate warning of the construction. None of the provisions herein shall be construed to restrict or prohibit, at any time, the prosecution of items of work which will not interfere with the use of existing streets.

All flagging, piloting, signs, barricades, maintenance of work, streets, structures, detours, temporary approaches, replacement or renewal of work, water applied for these items or for dust control, shall not be paid for directly, but shall be included in various pay items of the proposal and the CONTRACTOR shall not be paid an additional amount for such work. When so ordered by the Project Manager, detours shall be surfaced, and the materials needed shall be paid for by the cubic yard or ton as set forth in the pay items of the proposal.

SECTION 23: CLEANUP AND DUST CONTROL

It shall be the CONTRACTOR's responsibility to provide cleanup and dust control throughout all phases of construction, including suspension of work, and until final acceptance of the project. The CONTRACTOR shall keep the work site and other adjacent areas clean and free from rubbish and debris. The CONTRACTOR shall also abate dust nuisance by cleaning, sweeping, and sprinkling with water, or other means as necessary. A power broom will not be an acceptable means of cleaning the site unless used in conjunction with water to prevent dust from the power broom operation. The use of water resulting in mud on public streets will not be permitted as a substitute for sweeping or other methods. All water used for dust control must be from a potable water source.

All construction procedures shall conform to WCDHD-AQMD standards.

Excess excavated material from trenches, manholes, catch basins or similar structures in public streets shall be removed from the site immediately. At no time will the contractor be allowed to store debris or materials on the street overnight. All asphalt, concrete, soil and aggregate base will be hauled off at the conclusion of each working day. Materials for installation of sewer pipe, laterals, cleanouts, and catch basins will be allowed to be stored onsite with the approval of the project manager or inspector. Sufficient material may remain for use as backfill but shall not remain during non-working hours. Forms and form lumber shall be removed from the site as soon as practical after stripping. No screening of excavated material will be allowed in the street. The CONTRACTOR shall remove all trash from the site in a timely manner. At no time shall the CONTRACTOR permit disposal of trash in any excavation.

Materials and equipment shall be removed from the site as soon as they are no longer necessary; and, upon completion of the work and before final inspection, the entire worksite shall be cleared of equipment, waste

and unused materials, construction debris and rubbish so as to present a satisfactory clean and neat appearance.

Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately and the area cleaned.

Failure of the CONTRACTOR to comply with the Agency's cleanup orders may result in an order to suspend work until the condition is corrected. Working days will continue to be counted during the suspension. No additional compensation will be allowed as a result of such suspension. No extension of contract time will be allowed as a result of such suspension.

If the contract time expires before final cleanup has been completed, liquidated damages, as specified in these Special Provisions, may be imposed.

SECTION 24: FORCE ACCOUNT

THIS ITEM SHALL BE IDENTIFIED AS A CONTINGENT ITEM. The use of this contingent item will be as directed by the Engineer. The quantity of the above contingent item of work, as set forth on the bid schedule represent no actual estimate, is nominal only and may be greatly increased or decreased or reduced to zero. The increase or reduction of this quantity as compared with that set forth on the bid schedule shall not constitute a basis for claim by the CONTRACTOR for extra payment or damages.

Force Account items as defined by the City of Sparks will be additions to the contract arising within the course and scope of the contract for incidental costs due to unforeseen circumstances. Unforeseen circumstances include but are not limited to the following:

Emergency repairs, complications arising with interfacing new improvements to existing improvements, emergency pumping, emergency light/power plants, premium time or overtime to accelerate portions of work, unexpected utility modifications or conflicts, correcting existing substandard work, requested traffic control measures or signage, over-excavation of unsuitable materials, unknown field conditions, underground storage tanks, asbestos encountered, or any other miscellaneous or incidental items related to unforeseen circumstances.

Any force account items shall be adjusted daily upon report sheets, furnished to the Engineer by the CONTRACTOR and signed by both parties. These daily reports shall thereafter be considered the true record of force account items for unforeseen circumstances. No additional incidental work shall be performed or made except upon a written order from the Engineer.

SECTION 25: INSURANCE AND INDEMNIFICATION

The CONTRACTOR shall not commence any work nor permit a Subcontractor to commence work on this project until satisfactory proof has been presented to the City of Sparks Purchasing Division that all insurance requirements as outlined by the City have been met.

The CONTRACTOR shall provide and maintain, during the effective life of the awarded contract, Comprehensive General Liability Insurance covering the CONTRACTOR and the City of Sparks.

SECTION 26: EXISTING DRIVEWAYS

The CONTRACTOR shall be responsible for reestablishing existing driveways within 10 calendar days of removal of existing curb, gutter, and driveways. If the CONTRACTOR is unable to reestablish the driveways within the 10 calendar days, steel traffic plates will be required to be placed the entire width of the driveway at the CONTRACTOR'S expense. At no time will the CONTRACTOR be allowed to use aggregate base, sand or decomposed granite for ramping material.

SECTION 27: RECORD DOCUMENTS

The CONTRACTOR shall maintain, in a safe place at the job site, one record copy of the construction Drawings in good order and annotated to show all changes made during construction and all existing facilities exposed during construction. These record drawings shall be kept current and made available to the Project Manager and inspector for reference upon request. The CONTRACTOR shall, at the completion of the project, return one completed copy of the Record Drawings to the Project Manager. The City will not release CONTRACTOR's retention until the Record Drawings have been received and reviewed by the Project Manager.

SECTION 28: GARBAGE PICK UP

This is for recycled materials and garbage. It will be the responsibility of the CONTRACTOR to coordinate with Waste Management and residents to ensure that garbage collection is uninterrupted.

SECTION 29: PROJECT SUPERVISION

The CONTRACTOR will provide a superintendent for this project that is available during working hours. The CONTRACTOR will also provide a foreman for supervision of crews that are currently working on site. A "Working foreman" will not be permitted to supervise daily activities, subcontractors will be subject to this rule as well. Supervision of several crews by one foreman will be permitted; the superintendent can also act as the supervision of the crews however the superintendent must always remain on the job during working hours. A designated representative shall be available 24 hours in regard to bypass pumping if this system continues operation during non-working hours.

SECTION 30: LOCATION OF WORK, PUBLIC RELATIONS

It shall be the CONTRACTOR'S responsibility to notify, in writing, all residents and businesses adjacent to this project of the construction working hours and duration of work. Notification shall be provided directly to impacted properties (i.e. properties within a ½ mile radius) seven (7) calendar days prior to beginning work at that location excepting notification for Monday and Tuesday work shall be provided no later than 7:00 PM Thursday. Notification shall be in the form of a letter and "door hanger" or flyer that is hand-delivered by the CONTRACTOR to each residence/business. Letters will include construction schedule, start and stop times, any weekend work, and contact telephone numbers of project superintendent. The City will provide contact info of the Project Engineer to be included in the notification. A generic copy of the door hanger shall be provided to the Engineer for approval at the Pre-Construction Meeting. In the event of substantial delays or temporary cessation of the work for a period of more than five (5) Contract calendar days, the Contractor shall again notify affected residents and businesses of the delay and revised work schedule. This notification shall be in the form of a "door hanger" or flyer that is hand-delivered by the Contractor to each residence/business. A generic copy shall be provided to the Engineer for approval prior to distribution. The Contractor shall keep a log of all letters, door hangers and person to person contacts including date, address, and the name of the person they spoke with. A copy of the log shall be submitted to the Engineer each week.

Special consideration shall be given to schools to accommodate schedules for pedestrians, student drop-off, and busses.

In the event of delays that require rescheduling of work, the Contractor shall re-notify impacted properties in the same manner as described in the paragraphs above.

Special consideration shall be given to schools to accommodate schedules for pedestrians, student drop-off, and busses.

“NO PARKING” signs shall be displayed on streets at least 24 hours prior to operations. Signs shall be legible from inside vehicles and state the day and dates work will be performed. Signs shall be free from defects and unbroken.

In the event of delays that require rescheduling of work, the CONTRACTOR shall re-notify impacted properties in the same manner as described in the paragraphs above.

SECTION 31: CONSTRUCTION STAKING AND MATERIAL TESTING

Construction staking for manhole structures, pipe alignments (including slopes), survey monuments, compaction testing, asphalt and concrete testing will be provided by the City. Twenty-four (24) hour notice must be given by the CONTRACTOR to the Project Manager or Inspector prior to any staking and/or testing.

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BID ITEM CLARIFICATIONS
SANITARY SEWER IMPROVEMENTS PROJECT-McCARRAN BLVD & PRATER WAY
BID #24/25-012, PWP# WA-2025-205

BID ITEM 1 ~ Mobilization/Demobilization/Cleanup

Work to be performed under this item shall consist of mobilization, demobilization, and cleanup.

Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for work on the project; temporary power, water, sanitation facilities, and signage; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site.

Demobilization shall consist of all preparatory work and operations to remove all the facilities and personnel included in Mobilization.

Cleanup shall consist of neatly finishing the entire construction area after all the work indicated on the Plans and Specifications is completed and before final acceptance of the project. The entire construction area, including the roadway, parking, sidewalk areas, shoulders, driveways, side street approaches, trenches and construction areas shall be neatly finished to the lines, grades, and cross-sections shown on the Improvement Plans as hereinafter specified.

A street sweeper vacuum truck must be used to clean the roadway section. A power broom with a water truck will not be an acceptable means of cleaning the site. Throughout all phases of construction until final acceptance of the project, the Contractor shall keep the work site clean and free from rubbish and debris. The Contractor shall also abate dust nuisance by cleaning, sweeping and sprinkling with water, or other means necessary. The use of water resulting in mud or ice on public streets will not be permitted as a substitute for sweeping or other methods.

All backfill, aggregate or waste materials being hauled to or from the construction site shall be covered with a canvas or plywood material to prevent dust from entering the atmosphere. Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately, and the area cleaned.

All existing catch basins and DI where BMP devices are installed, the BMP shall be completely removed and disposed. The inside and surrounding surface of the catch basin and/or DI shall be thoroughly cleaned at the completion of the project with a vacuum truck.

The pay quantity shall be at the applicable unit price bid per Lump Sum which shall be deemed full compensation to complete the work as specified. The payment schedule for mobilization/demobilization/cleanup will be made as follows:

1. When 5% of the total original Contract amount is earned from other bid items, 50% of the amount of bid for mobilization/demobilization/cleanup will be paid.
2. When 50% of the total original Contract amount is earned from other bid items, 90% of the amount of bid for mobilization/demobilization/cleanup will be paid.
3. Upon completion of all work on the project, including completion of punch list work and submittal of record drawings by the Contractor, 100% of the mobilization/demobilization/cleanup item will be paid.

Increases in the total Contract Price for any reason does not justify an increase in the lump sum bid price for Mobilization/Demobilization/Cleanup.

BID ITEM 2 ~ Bypass Pumping

This work shall consist of all labor, materials, equipment, tools, excavation, trenching, pumping, and all incidentals necessary to bypass existing sewer flows during construction of the sanitary sewer interceptor per the requirements of Section 306.04.02 of the Technical Specifications.

The pay quantity shall be at the applicable unit price bid per Lump Sum which shall be deemed full compensation to complete the work as specified

BID ITEM 3 ~ Remove Existing 18" Sewer Pipe

This work shall consist of all labor, materials, equipment, tools, excavation, trenching, compaction, loading, hauling, unloading, and all incidentals necessary to complete the removal of existing sewer pipe. The work shall include, saw cutting, trenching, dewatering, shoring, bedding, backfill, compaction, disposal of excavated materials including pipe and asphalt, temporary pavement patching, incidentals and appurtenances necessary to complete the installation work.

The final pay quantity shall be by field measurement at the applicable unit price bid per linear foot which shall be deemed full compensation to complete the work as specified.

BID ITEM 4 ~ Fill Existing 10-inch Sewer Pipe with Cellular Concrete

This work shall consist of all labor, materials, equipment, tools, excavation, trenching, compaction, loading, hauling, unloading, and all incidentals necessary to complete the retirement and grout filling of existing cast iron water main. The work shall include, saw cutting, trenching, dewatering, shoring, bedding, backfill, compaction, installation of grout vents and sweeps, furnishing and placement of grout, concrete capping end of retired water main, disposal of excavated materials including asphalt, temporary pavement patching, incidentals and appurtenances necessary to complete the installation work.

The final pay quantity shall be by field measurement at the applicable unit price bid per linear foot which shall be deemed full compensation to complete the work as specified.

BID ITEM 5 ~ Remove Existing 12-inch Abandoned Transite Water Line, Including Asbestos Abatement, Handling, Storage & Disposal Plan (AAHSD), Permitting, Backfill with Aggregate Base and Compaction, complete and in place

This work shall consist of all labor, materials, equipment, tools, excavation, trenching, compaction, loading, hauling, unloading, and all incidentals necessary to complete the removal of transite pipe, including, but not limited to, saw cutting and asphalt removal and disposal; trench excavation (including haul and disposal of unusable and excess excavated material); shoring and sheeting; dewatering; removal and disposal of water main, valves and fittings; backfill, compaction; temporary asphalt restoration; and clean up; all in accordance with the Contract Documents. Backfill material shall meet the requirements of Class E structural fill and may be placed to within 3 feet of finish grade. Type 2 aggregate base shall be placed in the upper 3-feet or to the bottom of the existing asphalt.

This item shall also include all costs associated with developing a plan for remediation of asbestos pipe including, but not limited to, minimizing asbestos exposure, best work practices, jobsite safety, personal protective equipment, removal techniques, and complying to federal and state regulations; training and obtaining required certifications to employees; and obtaining all required permits for the handling and disposal of transite pipe, all in accordance with the Contract Documents. Review Article 4.06 of the TMWA General Conditions for additional description of this work.

The final pay quantity shall be by field measurement at the applicable unit price bid per linear foot which shall be deemed full compensation to complete the work as specified.

BID ITEM 6 ~ Remove and Dispose of Existing Manhole

This item includes providing all labor, materials, equipment, tools, excavation, trenching, dewatering, compaction, shoring, bedding, backfill, loading, hauling, unloading, and all incidentals necessary to complete the removal and disposal of existing manholes at locations as shown in plan set. This item also includes, excavation of the existing manhole structure and materials, disposal of excavated materials including manhole structure and asphalt, backfill and temporary pavement patching, and incidentals and necessary to complete the removal.

The final pay quantity shall be by field measurement at the applicable unit price bid per each which shall be deemed full compensation to complete the work as specified.

BID ITEM 7~ Furnish and Install 18-inch ASTM F679 PS46 Sanitary Sewer Main Pipe, Temporary Patch and ALL Appurtenances

This work shall consist of all labor, materials, equipment, tools, excavation, trenching, compaction, loading, hauling, unloading, and all incidentals necessary to complete the installation of 12-inch SDR 35 sewer mainline pipe. Pipe shall be furnished complete with all joining materials and other necessary appurtenances. All damaged or defective pipe and appurtenances shall be rejected and removed from the project site. The work shall include, saw cutting, trenching, dewatering, shoring, bedding, backfill, compaction, removal and disposal of the existing pipe, installation of new pipe, connections to new/existing manholes, sealing of manhole terminations, finishing of the connections to new/existing manholes, disposal of excavated materials including asphalt, temporary pavement patching, incidentals and appurtenances necessary to complete the pipeline installation work.

The final pay quantity shall be by field measurement at the applicable unit price bid per linear foot which shall be deemed full compensation to complete the work as specified. The pipe shall be measured from the edge of manhole and shall not include the manhole base width.

BID ITEM 8 ~ Furnish & Install 60-inch Type IV Sanitary Sewer Manhole, Including Excavation and Backfill and ALL Appurtenances, Including New Frame and Cover

This item includes providing all labor, materials, equipment, tools, excavation, trenching, dewatering, compaction, shoring, bedding, backfill, loading, hauling, unloading, and all incidentals necessary to complete the installation of Type IV Manhole at the location as shown in plan set. This item also includes installation of new City of Sparks 24-inch manhole frames and covers, placement of the barrel, cone (cone shall be a 60" to 24"), grade rings, external manhole joint wrap, temporary asphalt patching (as necessary), excavation of materials to accommodate the installation of the new manhole per the City Standard detail, disposal of the excavated materials and incidentals at a suitable facility.

Manhole frame and covers shall be raised to existing grade in the temporary asphalt patch but do not require a concrete collar and shall be included in this bid item. Concrete collar after final adjustment is included in other bid items.

The final pay quantity shall be by field measurement at the applicable unit price bid per each which shall be deemed full compensation to complete the work as specified.

BID ITEM 9 ~ Connect New 18-inch Pipe to Existing Manhole, STA. 1+75.94, Removal and Replacement of existing cone, Grout fill and Plug 18-inch Northwest Channel and ALL Appurtenances

This item includes providing all labor, materials, equipment, tools, excavation, trenching, dewatering, compaction, shoring, bedding, backfill, loading, hauling, unloading, and all incidentals necessary to complete the connection to the existing manhole located on the east side of Prater Way, Station 1+75.94 as shown in plan set. This item also includes removal and replacement of the manhole cone (cone shall be a 60" to 24" opening), furnish and install 24-inch City of Sparks manhole frame and cover, temporary asphalt patching (as necessary), excavation of materials to accommodate the connection and installation of the new 18-inch sanitary sewer pipe per City Standard detail, disposal of the excavated materials and incidentals at a suitable facility.

Manhole frame and covers shall be raised to existing grade in the temporary asphalt patch but do not require a concrete collar and shall be included in this bid item. Concrete collar after final adjustment is included in other bid items.

The final pay quantity shall be by field measurement at the applicable unit price bid per lump sum which shall be deemed full compensation to complete the work as specified.

BID ITEM 10 ~ Remove Existing and Construct PCC Median Curb Island

This work shall consist of all labor, equipment, materials and all incidentals necessary to remove and replace PCC median curb and flat work at the locations indicated on the plans. Work shall include, but not be limited to the removal of the existing PCC median curb, flat work and the existing aggregate base and/or subgrade materials, sawcutting adjacent bituminous plantmix pavement and/or concrete, and removal of existing materials, including tree roots, to the bottom of the new aggregate base depth in the areas indicated on the plans. PCC median curb island shall match the existing island as indicated on the plans. Also included in these items is the construction of PCC median curb island and to supply and install new aggregate base material with a compacted thickness of 6-inches.

The final pay quantity shall be by field measurement unit at the applicable unit price bid per square foot which shall be deemed full compensation to complete the work as specified.

BID ITEM 11 ~ Permanent Bituminous Pavement Patch, 8-inch Depth

The work shall consist of all labor, equipment, materials, and incidentals necessary to place permanent patch for including, but not limited to, tack coat, aggregate base, and placement and compaction of plantmix bituminous pavement per the NDOT Silver Book and SSPWC standard specifications and the Improvement Plans.

The plantmix bituminous pavement shall be a Type 2C, 75 blow, 4% air void mix using PG64-28NV asphalt cement. Aggregates shall be pre-marinated with lime per NDOT specifications. Recycled Asphalt Pavement (RAP) up to 15% will be allowed; however, all virgin aggregates will be subject to lime pre-marinating per NDOT specification.

The final pay quantity shall be by field measurement unit at the applicable unit price bid per square foot which shall be deemed full compensation to complete the work as specified.

BID ITEM 12 ~ Grind & Inlay, 1-inch Depth, Open Grade

The work shall consist of all labor, equipment, materials, and incidentals necessary to grind and inlay, 1-inch depth Open Grade including, but not limited to, grinding, tack coat, and placement Open Grade plantmix bituminous pavement per the NDOT Silver Book standard specifications and the Improvement Plans.

The final pay quantity shall be by field measurement unit at the applicable unit price bid per square foot which shall be deemed full compensation to complete the work as specified.

Bid Item 13 ~ Grind & Overlay, 3-inch Depth,

The work shall consist of all labor, equipment, materials, and incidentals necessary to grind and overlay the existing asphalt pavement, 3-inch depth including, but not limited to, grinding, sweeping, tack coat, and placement plantmix bituminous pavement per the SSPWC standard specifications and the Improvement plans.

The plantmix bituminous pavement for the overlay shall be a Type 2C, 75 blow, 4% air void mix using PG64-28NV asphalt cement. Aggregates shall be pre-marinated with lime per NDOT specifications. Recycled Asphalt Pavement (RAP) up to 15% will be allowed; however, all virgin aggregates will be subject to lime pre-marinating per NDOT specification.

The final pay quantity shall be by field measurement unit at the applicable unit price bid per square foot which shall be deemed full compensation to complete the work as specified.

BID ITEM 14 ~ Protect and Adjust Manhole Structure (New or Existing) to Finish Grade with New PCC Collar,

This work shall include the protection and adjustment of new and existing manholes at the locations within permanent patching, and/or asphalt overlay as indicated on the Improvement Plans and shall consist of all labor, equipment, materials and incidentals necessary for complete adjustment including, but not limited to, locating; referencing; protecting; adjusting to final grade; grouting grade rings and placing Portland cement concrete collar. Payment for grade rings, frame and cover hardware for new manholes shall be included in the applicable manhole installation bid items.

The contractor shall be paid one time for final adjustment to finish grade of each manhole structure. There shall be no direct payment for subsequent adjustments to manhole structures during construction.

The final pay quantity shall be by field measurement at the applicable unit price bid per each which shall be deemed full compensation to complete the work as specified.

BID ITEM 15 ~ Protect and Adjust Existing Gas and Water Valve Box to Finish Grade

This item is the protection and adjustment of utility valve boxes, including water and gas valve boxes, and shall consist of all labor, equipment, materials and incidentals necessary for a complete adjustment, including, but not limited to, locating; meeting with representatives of the owners of the valve boxes; referencing; protecting; adjusting to final grade; placing Portland cement concrete collar; and cleaning/replacement of valve box and riser pipe, as necessary at locations with permanent pavement patch, roadway reconstruction, and/or pavement overlay limits as indicated on the plans.

The Contractor shall coordinate with the TMWA and NV Energy prior to paving and final adjustment so that a leak detection test and valve box inspection can be performed.

The contractor shall be paid one time for final adjustment to finish grade of each gas and water valve box. There shall be no direct for subsequent adjustments to gas and water valve boxes during construction.

The final pay quantity shall be by field measurement at the applicable unit price bid per each which shall be deemed full compensation to complete the work as specified.

BID ITEM 16 ~ Reconstruct NDOT Survey Monument

This item of work shall consist of all labor, equipment, materials, and incidentals necessary, but not limited to, removing and installing survey monuments per NDOT Standard Specifications and Details. The Contractor will be required to supply new brass survey pins, new survey street cans and installation of monuments.

The final pay quantity shall be by field measurement unit at the applicable unit price bid per each which shall be deemed full compensation to complete the work as specified.

BID ITEM 17 ~ Replace Loop Detectors

This item of work shall consist of all labor, equipment, materials, and incidentals necessary, but not limited to, layout, saw cutting, installation of the loop wires, sealing and final connection per the City of Sparks Standard Details and the Improvement plans.

The final pay quantity shall be by field measurement unit at the applicable unit price bid per each which shall be deemed full compensation to complete the work as specified.

BID ITEM 18 thru 20 ~ Install 4-inch Solid Yellow or White; Install 4-inch Single Skip White and 8-inch Solid White, Pavement Striping (Type II Waterborne)

This item of work shall consist of all labor, equipment, materials, and incidentals necessary, but not limited to, installing centerlines, in NDOT Type II water-based paint for the stop approach and centerlines.

All traffic paint shall have two (2) coats per application with a minimum dry thickness of 10 Mil (0.010) per coat. The final dry thickness of both the first and second coat of paint shall be a minimum of 20 Mil's of the designated material placed. The second coat of paint may be placed once the first coat is completely dry to the touch unless otherwise directed by the City Project Coordinator.

Double stripes are considered a single unit and quantities represent the length of the double stripe. Dashed stripes shall include gaps but not breaks.

The final pay quantity shall be by field measurement unit at the applicable unit price bid per linear foot of pavement surface marked which shall be deemed full compensation to complete the work as specified.

BID ITEM 21 ~ Install 24" Solid White Stop Bar (Thermoplastic)

This item of work shall consist of all labor, equipment, materials, and incidentals necessary, but not limited to, surface preparation, priming, application, surveying layout, and installing 24-inch, white, 0.90 mil. Preformed Thermoplastic markings.

Length of striping is measured from end to end of the line.

The final pay quantity shall be by field measurement unit at the applicable unit price bid per linear foot of pavement surface marked which shall be deemed full compensation to complete the work as specified.

BID ITEM 22 ~ Install Solid White 2' x 10' International Crosswalk (Thermoplastic)

This item of work shall consist of all labor, equipment, materials, and incidentals necessary, but not limited to, surface preparation, priming, application, surveying layout, and installing 24-inch wide, 10-foot long, white, 0.90 mil. Preformed Thermoplastic markings.

Length of striping is measured from end to end of the line.

The final pay quantity shall be by field measurement unit at the applicable unit price bid per linear foot of pavement surface marked which shall be deemed full compensation to complete the work as specified.

BID ITEM 23 ~ Install Preformed Solid White Symbol, Right Arrow, (Thermoplastic)

This item of work shall consist of all labor, equipment, materials, and incidentals necessary to install Preformed Thermoplastic arrow symbols. Work shall include, but not be limited to surface preparation, priming, application, surveying layout, and incidentals necessary for a complete installation.

The final pay quantity shall be by field measurement unit at the applicable unit price bid per each which shall be deemed full compensation to complete the work as specified.

BID ITEM 24 ~ Traffic Control

This item is the provision of traffic control in accordance with the Special Provisions and Technical Specifications for all items in the base bid. The work comprising the unit price bid for this item shall consist of all labor, equipment, materials and incidentals necessary to comply with Section 22 of the Special Provisions and Section 349 of the Technical Specifications including, but not limited to, preparation and distribution of plans, notices and reports; setup, removal and maintenance of all barricades, signs, channelizing devices, barrels, cones, flag persons, detours, pilot cars, arrow boards, and message boards; temporary striping; temporary paving; temporary aggregate base; and plantmix bituminous ramps.

A final traffic control plan shall be required for work within the NDOT ROW and shall be submitted to the City as a separate plan that will be submitted for the final review and approval of the NDOT Temporary Encroachment Permit requirements.

There shall be no additional payment for changes in the traffic control plan required as a result of changes in the Contractor's work method or schedule.

Contractor will be required to provide safe pedestrian access which may include but is not limited to signs, fencing, flaggers etc. Contractor will be required to provide a pedestrian safety plan to the City for review prior to the commencement of work. Payment for this work shall be included in this bid item.

Quantity for payment for this item will be per Lump Sum, complete, in place, which shall be deemed full compensation to complete the work as specified.

BID ITEM 25 ~ Force Account

This item is a force account for the purpose of including a reasonably anticipated net increase in the contract amount, approved as necessary by the City of Sparks, for items included in the bid schedule which have increased based on field measured quantities.

The lump sum unit price bid amount of \$85,000.00 for bid item 25 shall be the same for all bidders in accordance with the bid schedule.

There is no direct payment for this item. The FORCE ACCOUNT amount may be used entirely, partially, or not at all.

TECHNICAL SPECIFICATIONS
SANITARY SEWER IMPROVEMENTS PROJECT-McCARRAN BLVD & PRATER WAY
BID #24/25-012, PWP# WA-2025-205

Unless otherwise amended in these Technical Specifications, all materials, construction methods, etc. shall follow the Standard Specifications for Public Works Construction (Orange Book), 2012 version, Truckee Meadows Water Authority (TMWA) Technical Specifications, Exhibit A (included with this Bid package) and the Nevada Department of Transportation (NDOT) Standard Specifications for Road and Bridge Construction, latest version

SECTION 300 CLEARING AND GRUBBING

300.01 Description. This Section covers the construction methods involved in the clearing and grubbing operation.

300.02 Limit of Work. Limit of work shall conform to Standard Specifications Section 300.

300.02.01 Scope. Scope of work shall conform to Standard Specifications Section 300.

300.02.02 Work Outside of Stated Limits. No payment will be made to the Contractor for clearing and grubbing outside the stated limits, unless such work is authorized by the Engineer. All surface improvements and landscaped areas that are damaged by actions of the Contractor shall be restored to their original condition at the Contractor's expense.

300.02.03 Root Mitigation. In the event that the Contractor is working within the drip line of a tree, or within 1 foot per diameter inch of tree (Example: within 12 feet of a 12" diameter tree), the Contractor shall notify the City of Sparks seven (7) days prior to excavation. All tree root mitigation work shall be performed under the supervision of an ISA qualified Contractor.

300.02.03.01 – Exposure of Tree Roots. Where root mitigation is indicated on the plans, the Contractor shall remove the concrete without digging into the supporting base materials and minimize root disturbance. If the Urban Forester requests special methods to expose the roots, the Contractor shall expose the roots using a pneumatic or hydraulic spade tool, vacuum truck or similar device, which will loosen and remove the surrounding soils without damaging the tree roots. The Contractor shall coordinate to have the roots exposed using a pneumatic or hydraulic spade tool, vacuum truck or similar device within two (2) days of concrete removal. The Contractor shall not expose tree roots without having the time or materials to rebury the root within 48 hours per specifications. Exposure work shall be completed by work area, street segment, or other grouping to maximize continuity of root mitigation efforts. Tree roots may be requested to be exposed under area of sidewalks, driveways, and their approaches, curb and gutter and areas within the street. Once tree roots have been exposed, an ISA qualified contractor will perform root pruning mitigation work.

300.02.04 – Protection, Trimming & Removal of Trees. If a tree or any landscaped vegetation is damaged or destroyed by construction, or any action of the Contractor that is found to be in disregard of the Urban Forester's instructions, the damage will be appraised using the Council for Tree and Landscape Appraisers Guide (CTLA). For total loss, the Contractor will have the appraised value of the tree removed from the

total contract amount. For partial damage, the tree will be devalued and the difference between the appraised value and the devalued appraisal shall be deducted from the contract amount.

In areas where existing landscaping (trees, shrubs, branches, etc.) may be impacted or are interfering with trench, curb, gutter, sidewalk and driveway aprons, the Contractor shall notify the adjacent property owner and the City of Sparks before commencing any landscape modifications such as pruning, trimming, or removal of landscaping. Any said modifications shall only be performed at the direction of an ISA certified arborist. No field meetings between the Contractor and the Arborist shall take place without the Engineer or representative being present when tree root mitigation instructions are issued. Some work may be performed by the City of Sparks if directed by the Urban Forester. The Contractor will not be paid for work performed by the City of Sparks.

300.05 Basis of Payment. There shall be no direct payment for clearing and grubbing. Compensation for clearing and grubbing operations specified herein shall be considered included in other items of work.

SECTION 301 REMOVAL OF EXISTING IMPROVEMENTS

301.01 Description. This Section covers the construction methods involved in removing existing improvements.

301.02 Limit of Work. The Contractor shall restrict their operations to the limits of the City right-of-way, City easements, and temporary construction easements. Removal of existing improvements shall extend to the limits of sidewalk and driveway reconstruction, trench excavation and structural excavation, or beyond, if necessary for protection of new and existing utilities, and to the limits of pavement rehabilitation or resurfacing as shown on the Improvement plans. This work covers the removal of existing composite surface, asphalt concrete pavement, curb and gutter, driveway aprons, sidewalks, pedestrian ramps, sanitary sewer, storm drain, abandoned gas main, drop inlets, vegetation, signs, irrigation facilities, landscape features, manhole structures and fences.

301.02.02.01 Removal of Bituminous Pavement. The existing roadway surface may have steep crowns, flat crowns, offset crowns, excessive pavement depths, overlaid gutter pans, or other variations in the existing pavement that may necessitate removal of existing depths greater than the proposed pavement section. The Contractor shall include the removal and disposal of bituminous pavement, concrete, base rock, or native subgrade to the depth necessary to achieve the grades noted on the Construction Documents.

Roadway removal limits include existing pavement within the limits of proposed lip of gutter. It shall be the Contractor's responsibility to protect the integrity of the edge of pavement adjacent to the removal section.

The Contractor shall remove all existing improvements to the required depth by a method that does not damage the subgrade. Excessive pneumatic wheel construction equipment, i.e. trucks, loaders, scrapers, etc., shall not be permitted on the roadway section after the existing asphalt is removed. Contractor shall remove existing material including pulverized improvements (if applicable) to proposed subgrade elevation by a method that does not require excessive pneumatic wheel type equipment on the exposed grade. Milling machine will be acceptable. Should the Contractor place excessive pneumatic wheel construction on the roadway section after the existing asphalt has been removed, all stabilization/over-excavation shall be at the Contractor's expense. Large scrapers or off-road mining trucks shall not be permitted on any public street.

The existing AC pavement surface on all permanent patches shall be cut back on all sides of the trench a distance of not less than twelve (12) inches (eighteen (18) inches in NDOT R.O.W.) from the trench edge or as directed by the Engineer. This shall be accomplished with an abrasive type saw and the cuts shall be straight.

The use of a rock wheel will not be allowed on this project. Existing AC pavement and the base shall be removed and disposed of as required.

If cut is within two (2) feet of an existing pavement edge or pavement patch, remove the composite pavement and base section to that edge (not to extend beyond edge of lane) and replace entire composite section.

301.02.02.02 Removal of Portland Cement Concrete. Existing Portland Cement Concrete (PCC) improvements shall be removed to neatly sawed edges with sawcuts at right angles to the curb face. Refer to Section 300.02.03 if concrete is within the limits of root mitigation.

Curb and gutter removal limits shall be from the back of curb to the proposed lip of gutter and from the existing top of curb to the bottom of the proposed aggregate base under the proposed curb and gutter. The contractor shall be required to achieve a vertical, neat line in a location appropriate for the method of curb and gutter placement chosen. The Contractor shall match the existing top of curb and maintain the uniform flow line of the gutter. If a uniform flow line does not exist, the Contractor shall establish a uniform flow line as directed by the Engineer.

Sidewalk removal limits shall be from the back of curb to the proposed back of sidewalk and from the top of sidewalk to the bottom of the proposed aggregate base under the proposed sidewalk. The contractor shall be required to achieve a vertical, neat line in a location appropriate for the method of sidewalk placement chosen.

301.03 Removal of Materials. The Contractor shall remove all materials immediately from the site. All debris such as; concrete, aggregate base, composite material, trench spoils, etc., shall **NOT** be cast onto the streets or into the sanitary sewer or storm drain collection system. All excavated materials and debris shall be loaded directly into a truck and removed from the site.

Curb and gutter, sidewalk, driveway aprons, pedestrian ramps, storm drain, sanitary sewer, catch basins, drop inlets, manholes, signs, and fences to be removed are shown on the improvement plans. Manholes are to be completely removed including the manhole base unless specified otherwise on the Improvement Plans or in these Specifications. Areas where structures are removed surface shall be restored to match the surrounding area as directed by the Engineer. Only the portion of the structure called out to be salvaged shall be salvaged. The remainder of the structure shall become the property of the Contractor. Removal of catch basins or drop inlets shall include the removal of curb, gutter and sidewalk necessary to complete the item as specified. All abandoned conduits, pipes and structures within the City right-of-way or City easements shall be either removed by excavation or plugged with grout as specified in Section 306 – “Storm Drain, Culverts, and Sanitary Sewer Construction” of these Specifications. All materials removed shall be hauled from the site at the Contractors expense unless otherwise specified. Backfill for materials removed shall be per Section 305 of these Specifications.

The City reserves the right to salvage any items scheduled for removal. The Contractor shall notify the City Project Manager five (5) days prior to any salvage or demolition work to determine the disposition of items to be removed. The Engineer will mark items to be salvaged. Such items shall be properly disconnected, removed from their foundations, cleaned, and stored at a location specified by the Engineer.

The Contractor shall promptly dispose of materials not designated for the City’s salvage or reuse. The Contractor shall not store or sell Contractor-salvaged items or materials on site.

All abandoned pipes four-inch (4”) in diameter or greater located within City right-of-way shall be grout filled or removed by excavation. All abandoned structures located within City right-of-way shall be removed by excavation, unless otherwise stated in the Construction Documents.

If encountered, removal Asbestos Cement Pipe (ACP), Transite Pipe (TR) and of materials containing asbestos shall be performed in accordance with all applicable standards, local, state, and federal including but limited to Washoe County Health Department, OSHA, NDEP, and EPA. The Contractor shall be required to obtain a Washoe County Waste Release Permit and pay all associated fees and cost related to the legal handling, transportation, and disposal. Proper safety equipment shall be utilized by workers and by transport equipment and no fugitive dust will be allowed during this work. All work to be performed under the direction of an approved certified professional. The Contractor shall provide a disposal manifest that documents the location removed and quantity with a corresponding disposal receipt from a landfill that can legally accept and dispose of the material. The Engineer and City of Sparks may withhold final payment for the removal of transite pipe until proof of legal disposal is provided by the Contractor.

The Contractor shall be responsible for protecting traffic and the public from removal areas including detours, fencing, signage, etc. as needed.

301.04 – Protection of Items Not Removed. Protection of items not to be removed shall conform to Standard Specifications Section 301 – “Removal of Existing Improvements”. In addition to the Standard Specifications, the Contractor shall take extreme care to protect any structure and/or vegetation not being removed while working within easement areas. Damaged items shall be replaced with in-kind items at the Contractor’s expense.

Existing facilities whether above or below grade shall be protected from damage by the Contractor’s operations. Any damage shall be repaired to the satisfaction of the City Project Manager at the Contractor’s expense.

The locations of existing underground utilities shown on the drawings were determined from various sources. It is the Contractor’s responsibility to determine the actual location of underground facilities as noted in the design drawings. Potholing shall be required and shall be incidental to the most appropriate bid item.

Any existing improvements, including, but not limited to, retaining walls, adjacent property, utilities, sprinkler systems, signs, sod, topsoil, decorative rock, and weed barrier fabric, other facilities or appurtenances which are damaged or displaced as a result of the Contractor’s operation shall be restored to the original position and condition prior to the end and payment at the Contractor’s own expense.

Where lawn or landscape areas have been disturbed, contaminated or removed, the Contractor shall replace the topsoil. Topsoil material shall be per Section 200.08 of the Standard Specifications. Where existing lawn is disturbed it shall be repaired with sod in accordance with Section 223 – “Sod” of the Standard Specifications. Grass seed will not be accepted. The Contractor shall not place the sod when daily air temperatures are above 90° F or night time lows are below 32° F.

Contractor shall be responsible for the protection of existing fences and retaining structures adjacent to items of work during all construction activities, with the exception of fences that have been identified on as remove and replace on the Construction Documents. Damaged items shall be replaced with in-kind items at the Contractor’s expense.

Irrigation Systems - In the event an existing irrigation system is damaged, it shall be repaired within twenty-four (24) hours. The Contractor shall be required to provide water to the affected area until such time the irrigation is repaired to the satisfaction of the Engineer. Repair or replacement of damaged irrigation parts and/or system shall be made with the same brand name and model or approved equal.

If the Contractor fails to repair the damaged irrigation system within forty-eight (48) hours of when the damage occurred, the Engineer may, after written notice to the Contractor, have the deficiencies repaired by others and deduct the cost of the repairs from the monies owed the Contractor.

301.05 Basis of Payment. There shall be no direct payment for removal of steep crowns, flat crowns, offset crowns, excessive pavement depths, overlaid gutter pans or other variations in the existing pavement. There shall be no direct payment for the removal and disposal of bituminous pavement, concrete, base rock, or native subgrade, cobble or boulders required to meet the depth necessary to achieve the elevations and grades noted on the Improvement Plans. There shall be no direct payment for sawcutting and removing existing extended and/or overlaid gutter pans necessary to install improvements. There shall be no direct payment for removal of existing improvements, including abandoned wastewater pipe, abandoned water pipe, valves and appurtenances required to perform the construction specified. Compensation for removal of existing improvements required to perform the construction operations specified shall be considered as included in the price bid for other items of work and no additional compensation will be allowed the Contractor.

SECTION 302 SUBGRADE PREPARATION

302.01 – Description. This Section covers the preparation of natural, filled, or excavated material prior to the placement of additional fill and/or improvements.

302.02 Preparation of Subgrade. Preparation of subgrade shall conform to Standard Specifications Section 302. In addition to the Standard Specifications, subgrade preparation shall be as follows:

1. The Contractor shall remove all existing improvements to the required depth by a method that does not damage the subgrade. Pneumatic wheel construction equipment, including, but not limited to, trucks, loaders, excavators and scrapers, will not be allowed on the exposed subgrade within the roadway section. all over-excavation and deep stabilization shall be at the Contractor's expense if the Contractor fail to utilize necessary caution to protect the subgrade or allow pneumatic wheel construction equipment on the subgrade within the roadway section after the existing surface has been removed.
2. In areas below new plantmix bituminous pavement sections, the subgrade shall be rolled with a vibratory smooth drum roller, as much as practical without causing pumping, to obtain a smooth neat surface. If shallow utilities are present the Contractor may static roll these areas to protect underground pipes, conduits, and other infrastructure as warranted to achieve proper compaction.
3. In areas where the relative compaction is specified the maximum dry density and moisture content shall be determined in accordance with the test procedures set forth in ASTM D1557.

302.07 Basis of payment. There shall be NO DIRECT PAYMENT for excavation and preparation of the subgrade. Compensation shall be deemed included in other items of work.

SECTION 303 – UNCLASSIFIED EXCAVATION

303.01 Description. Unclassified excavation shall consist of all excavations, unless separately designated.

303.02.02 Unsuitable Material. Material that is unsuitable for the planned use shall be excavated and disposed of by immediately removing it from the site. No material shall be cast onto the street; all excavated materials shall be loaded directly into a truck and removed from the site.

The Contractor shall immediately notify the Engineer of any questionable conditions, such as pumping areas or expansive subgrade soils so an over-excavation determination may be made in a timely fashion. If in the opinion of the Engineer, the existing subgrade is unsatisfactory for the planned use including but not limited to sanitary sewer, storm drain, domestic water or roadway improvements, the Contractor shall over-excavate and backfill using Section 303.02.02.01.

303.02.02.01 Overexcavation Of Unsuitable Material And Backfill. When directed by the Engineer, unstable, or "pumping" soils shall be over-excavated and replaced with a stabilizing fill overlying a geotextile. The Engineer shall determine the minimum depth of over-excavation depending on the native soil conditions.

A Stabilization Geotextile is required to be placed beneath the stabilizing fill overlying the subgrade soils. The geotextile shall meet or exceed the minimum properties of Section 218.03 of the Standard Specifications.

Prior to placement of the geotextile, the subgrade surface should be smooth without sharp particles or abrupt edges. The geotextile should be laid in accordance with the manufacturer's recommendation with a minimum joint overlap of 18 inches. Construction equipment is prohibited from traveling over the geotextile surface. The stabilizing fill should be pushed ahead of the construction equipment during placement over the geotextile. Unless a thinner stabilizing fill lift can be utilized due to the presence of a shallow firm soil horizon, it is recommended that the initial lift of stabilizing fill have a minimum loose lift thickness of 12 inches with the total minimum thickness of stabilizing fill over the geotextile should be 18 inches. Additional lifts of stabilizing fill may be necessary. The stabilizing fill material shall meet the requirements of Type 2 Class B Aggregate Base, Section 200.01.03 – "Crushed Aggregate Base" of the Standard Specifications.

Stabilizing fill shall be firm and unyielding and be densified to at least 90 percent relative compaction per ASTM D1557. Subsequent lifts should be placed in maximum 8-inch lifts.

303.04.01 Basis of Payment. There shall be no direct payment for unclassified excavation except as stated in 303.04.02. Compensation for unclassified excavation and disposal required to perform the construction operations specified shall be considered as included in the price bid for other items of work and no additional compensation will be allowed the Contractor.

SECTION 305 TRENCH EXCAVATION AND BACKFILL

305.01 Description. This item shall include furnish all materials, equipment and labor for saw cutting, excavating, trenching, backfilling and temporary patching of all sanitary sewer and storm drain work delineated on the Improvement Plans, in these Specifications or as directed by the Engineer.

The Contractor shall verify all inverts, sizes of connection point, confirm grades, and make exploratory excavations as required to locate all possible conflicting utilities and notify the Engineer in writing of all conflicts prior to ordering materials and prior to commencement of underground construction.

It is anticipated that storm, surface and ground or other waters will be encountered at various times during

the work herein contemplated. The contractor shall be responsible for all removal of said water to facilitate the work. All costs associated with removal of groundwater including, but not limited to, bypass pumping shall not be subject to additional payment and be included in applicable pipe installation bid item. Disposal of groundwater into the storm drain system shall not be allowed without an approved groundwater discharge permit through NDEP. The Contractor, by submitting a Proposal, acknowledges that they have investigated the risks arising from such waters and has prepared the Proposal accordingly, and the Contractor by submitting a Proposal assumes all of said risk.

The Contractor shall conduct their operation in such a manner that storm or other waters may proceed uninterrupted along their existing street and drainage courses. Drainage of water from existing catch basins and inlets shall be maintained at all times. Diversion of water for short reaches to protect construction in progress will be permitted if public or private properties are not damaged, or in the opinion of the Engineer, are not subject to probability of damage.

If public or private property becomes damaged by flood or other waters because of the Contractor's operations, the Contractor shall repair such damage to the satisfaction of the appropriate owner at their expense. The Contractor shall obtain written permission from the applicable public agency or property owner before any diversion of water will be permitted by the Engineer.

Wherever necessary in order to provide proper evacuation of water from the trench and construction area, the Contractor shall at their expense, furnish and operate all necessary pumping equipment, drainage sumps, wellpoint systems and other drainage facilities. Discharge of pumpage shall be at points approved by the Engineer.

The Contractor is cautioned that they may encounter large boulders or hard rock excavation during trench excavation and that special construction techniques may be necessary and will be considered normal for this construction. All cost associated with excavation and trenching in rock, including additional export, additional backfill, additional temporary and permanent pavement shall not be subject to additional payment and be included in the applicable trenching and excavation bid items.

The Contractor is cautioned that they may encounter materials that are not excavatable by conventional methods. Specialized equipment may be required to remove the material to desired depths, including but limited to chipping of bedrock. Use of explosives is not allowed.

The Contractor is cautioned that they may encounter unstable trench walls due to granular backfill of the existing, adjacent utilities. Special construction techniques including but not limited to removal of additional surface improvements, reduction of open trench length, and use of trench boxes may be necessary and will be considered normal for this construction. All cost associated with removal and replacement of surface improvements, reduction of open trench length, use of trench box, additional export, additional backfill, temporary and permanent pavement shall not be subject to additional payment and be included in the applicable trenching and excavation bid items. Contractor is directed to the geotechnical investigation performed by Construction Materials Engineers, Inc (CME) for the North McCarran Boulevard & East Prater Way Sewer Capacity Improvement Project, November 2021.

305.02 Maximum Length of Open Trench. Maximum length of open trench shall be 300 feet or the amount that can be excavated, pipeline installed, and backfilled within one working day, whichever is less. For work across roads (transverse cuts) the maximum length of open trench shall be 200 feet. The length of time that intersections are closed to traffic must be kept to a minimum. All vehicle travel lanes affected by construction activities shall be opened to traffic before the end of each working day except where approved by the Engineer, or specifically indicated on the construction drawings.

The trench shall be backfilled before the end of each working day. The Contractor may use steel plating within the city right-of-way over excavations to satisfy the vehicle travel lane requirements before backfill and temporary pavement placing is completed. The use of steel plates shall conform to the following requirements:

- A. Steel plating shall be flush to existing grade with cold mix applied underneath and around all edges of plate to prevent vibration and minimize noise when vehicles travel over plate.
- B. Use plate locks around the perimeter of the road plate or plates. Plate Locks should not be extended beyond the end of the road plate.
- C. The appropriate sized Plate Shims shall be placed under the road plate where there is not direct contact with the road surface giving the plate full bearing aligning Plate Shim holes with Plate Locks mounting holes as per the manufacturers' recommendations.
- D. 3/8" x 4" threaded concrete anchors with washers shall be placed through the Plate Locks and Plate Shim securing holes into the road surface.
- E. Spacing for the concrete anchors shall be at minimum intervals of 24" or less. Anchor a minimum of 4" and a maximum of 8" from each end. Under high traffic conditions, more frequent spacing may be required to eliminate plate creep.
- F. A "non-slip" surface plate shall be used in crosswalks or high pedestrian areas.
- G. Warning signs must be appropriately placed to caution motorists.
- H. Plate lock holes shall be filled with an epoxy grout. Excessive damage to existing asphalt due to plate locks shall be repaired to the satisfaction of the Engineer.

The use of trench plates shall be coordinated through the City Project Coordinator or on-site inspector. Steel trench plates will not be allowed if snow or freezing temperatures are expected. Steel plates will not be allowed within NDOT right-of-way.

305.03 Trench Width - The trench width shall be kept to a minimum within all areas due to existing underground utility conflicts and to minimize the amount of pavement replacement required. All conflicting utilities shall be supported in the trench section or removed and replaced. Above ground utilities shall also be supported where necessary. No additional compensation will be allowed the contractor including, but not limited to, additional excavation, backfill, paving and surface restoration for wider trench widths greater than the minimum.

305.06 Shoring Shoring and bracing shall conform to Standard Specifications Section 305 and Federal OSHA Safety and Health Standards Section 2207. In addition to the Standard Specifications, all shoring, sheeting, sheet piling, lagging, and bracing shall be accomplished in such a manner as to maintain the required excavation or trench section and to maintain the undisturbed state of the soils below and adjacent to the excavation. Horizontal strutting below the barrel of a pipe and the use of pipe as support is not acceptable. The construction of sheeting, shoring, and bracing shall not disturb the state of soil adjacent to the trench and below the excavation bottom. Shoring methods prepared by a State of Nevada registered professional engineer shall be submitted to the Engineer for review prior to commencing any trenching five (5) feet deep or more. Nothing in this requirement shall be construed to impose tort liability on the City, Engineer or any of its employees or representing agents.

305.08 Bedding. The bedding materials shall conform to the requirements of NDOT Silver Book, Section 207 for all bedding within this project. Drain rock will not be allowed in either the city or NDOT right-of-way.

In addition to the Standard Specifications, bedding material shall be placed to the limits specified in the Improvement Plans or as shown on the Standard Details. Bedding material shall be compacted to 90% of maximum dry density. Compaction by jetting will not be permitted. Bedding material required for the work

day use may only be stored within the limits of the section under construction that is properly cordoned off by traffic control.

305.09 Backfill. Trench backfill material shall be aggregate base materials that conform to the requirements of Section 200.01.03 – “Crushed Aggregate Base” Type 2, Class B or Section 200.01.04 -- “Recycled Aggregate Base” Type 1 (Import) of the Standard Specifications and NDOT Silver Book, Section 302. Crushed or pulverized asphalt concrete, not meeting these requirements, will not be acceptable as aggregate base.

Slurry backfill shall conform to Section 207.02.02 Slurry Cement Backfill, Class A – Excavatable, 50 to 200 psi 28-day strength – of the Standard Specifications for Road and Bridge Construction, Nevada Department of Transportation, latest edition. Excavatable slurry backfill in trenches shall cure for a minimum of 24 hours prior to backfill and compaction on top of slurry.

305.20 Basis of Payment. There shall be no direct payment for trench excavation, bedding, trench backfill (native, imported and/or slurry), filter fabric and densification for the sanitary sewer and storm drain improvements. Compensation for trench excavation, bedding, trench backfill (native, imported and/or slurry), filter fabric, densification and temporary patching as specified to perform the construction operations shall be considered as included in the linear foot price bid for the applicable sanitary sewer or storm drain main replacement bid items, and no additional compensation will be allowed the Contractor.

SECTION 306 STORM DRAIN, CULVERTS AND SANITARY SEWER CONSTRUCTION

306.01 Description. This work shall consist of the furnishing of trenching, bedding, pipe material and appurtenances, compacted backfill, and temporary patching, for gravity storm drains, culverts and sanitary sewers.

306.02 Materials. Materials shall conform to Section 203 – “Pressure and Non-Pressure Pipe”, with the following exceptions;

1. PVC solid wall sanitary sewer and storm drain pipe

Materials for PVC sanitary sewer and storm drain pipe shall conform to the Standard Specifications unless otherwise specified in these specifications. PVC ASTM F679, PS 46 sewer pipe shall meet the requirements of ASTM D2412, and shall meet the minimum stiffness of 46 P.S.I. as defined by the requirements of ASTM F679 applied based on diameter. PVC pipe shall be joined by means of gasketed bell and spigot joints and shall have a home mark on the spigot end to indicate proper penetration when joint is made.

2. Pipe connections

Pipe clamps shall be stainless steel, including bolts and lugs as manufactured by JCM Industries Type 108 or approved equal. Contractor shall furnish full circle, universal clamp couplings with a minimum three-sixteenths (3/16) inch thick neoprene, grid-type gasket. Clamps shall be constructed to fit outside diameter of pipe. Minimum clamp length shall be eighteen (18) inches for replacement pipe O.D. of less than ten and three-quarters (10.75) inches. Flexible couplings shall conform to ASTM C425, as manufactured by Fernco, Series 5000 strong back RC couplings or approved equal.

3. Pipe pillows at main or lateral connections

The concrete pillow shall be Portland Cement Concrete (P.C.C.), 3,000 PSI minimum compressive strength at 28 days, minimum of six sacks of cement per cubic yard with a slump of one to four

inches.

4. Mechanical service lateral connections

Push on “wye” fittings shall be used for all service lateral connections into mains 8” to 15” unless otherwise approved.

306.02.01 Quality Control. Testing and inspection of new installations shall conform to Section 336 – “Inspection and Testing” of these Specifications. The replacement pipe shall not have sags and/or bellies in the main that cause pooling. Contractor shall repair or replace any section of new sewer pipe with sags/bellies at their own expense.

306.04 Gravity Lines. Construction of gravity lines including sewer service laterals shall conform to Standard Specifications Subsection 306. In addition to the Standard Specifications, all sanitary sewer pipe shall be constructed with SDR-35 PVC unless specified otherwise on the Improvement Plans or in these Specifications. Storm drain/sanitary sewer pipe shall be laid from the downstream discharge point or connection point to the existing system. The new system shall be constructed so laterals, basins and/or drainage systems are connected so that any sanitary sewer/storm runoff will drain freely. Sanitary sewer/storm drain pipe shall be laid with the socket or collar ends of the pipe upgrade unless otherwise authorized by the Engineer. Bell and spigot ends shall be cleaned and lubricated just prior to installation. Pipe shall not be stuck past the home mark.

Fernco, Series 5000 RC couplings or approved equal may be utilized for field joining new pipe to existing pipe at all connection locations. Connections shall be watertight. A concrete pillow shall be constructed beneath the new pipe connection for support. The pillow material shall conform to Section 306.2.3 of these Specifications. The pillow shall have a minimum coverage of six (6) inches under the pipe and extend up to the flowline of the pipes. The length shall be determined in the field by the Engineer. Contractor shall allow sufficient time for concrete pillow to cure and harden prior to backfill. Contractor shall note it is critical that the transition flowlines at pipe junctions are flush and smooth. Joints that have settled causing a vertical offset or separation at the pipe connection flowline shall be repaired at the contractor’s expense.

Connections to different types of pipe shall be made by means of flanges, specified adapters, or transition fittings. Where sleeve type couplings are used, both shall be uniformly torqued in accordance with pipe manufacturer’s recommendation. Foreign material shall be removed from the interior of the pipe prior to assembly.

The Contractor shall verify all inverts and make exploratory excavations (potholing) as required to locate all possible conflicting utilities and notify the Engineer in writing of all conflicts at least forty-eight (48) hours prior to commencement of any underground construction unless stated otherwise on the Construction Drawings.

The Contractor shall coordinate the relocation of existing private utilities to be performed by Contractor where shown on the improvement plans and where it is determined during construction that said relocation will be necessary due to conflicts with new facilities to be installed or constructed under this Contract.

The Contractor shall cooperate fully with all utility forces, other Contractors, and forces of other public or private agencies engaged in any type of work which may interfere with the progress of the Contractor's work. The Contractor shall schedule the work so as to minimize any interference with the hereinbefore mentioned forces.

The Contractor shall in no way interfere with the operation of existing sewers, storm drains or other pipelines, except as specified herein and shall exercise every precaution to ensure that debris and material from

construction operations do not enter the sewer system. Any debris or blockage entering into the sewer or storm drain as a result of the Contractor's work shall be immediately removed at the Contractor's expense.

306.04.01 Conflicting Utilities. The Contractor shall verify all inverts and make exploratory excavations (potholing) as required to locate all possible conflicting utilities and notify the Engineer in writing of all conflicts at least forty-eight (48) hours prior to commencement of any underground construction unless stated otherwise on the Construction Drawings.

The Contractor shall coordinate the relocation of existing private utilities to be performed by said private utility where shown on the improvement plans and where it is determined during construction that said relocation will be necessary due to conflicts with new facilities to be installed or constructed under this Contract.

The Contractor shall cooperate fully with all utility personal, other Contractors and sub-contractors, and personal of other public or private agencies engaged in any type of work which may interfere with the progress of the Contractor's work. The Contractor shall schedule the work so as to minimize any interference with the hereinbefore mentioned personal, agencies, and utility companies.

306.04.02 Bypass Pumping. Contractor shall provide labor, materials, and supervision to temporarily bypass flow around the construction work in accordance with these Specifications.

Sanitary sewer mains shall remain in service at all times throughout the duration of the project. Contractor shall be responsible for diverting flow away from the limits of construction through the use of bypass pumping or flow diversions with prior approval by the Engineer.

Service to laterals shall be disrupted for a period of no more than 8 hours. Laterals within residential areas shall only be out of service between the hours of 8:00 am to 5:00 pm, Monday through Friday. Laterals within business areas shall be addressed on a case by case basis. If Contractor feels that it is necessary to disrupt lateral services for a period longer than 8 hours, Contractor shall provide alternate means of service without disrupting use of the service by the owner/resident.

Bypass routing shall be the responsibility of the Contractor.

Project bypass pumping system requirements are defined below. Projects that are in environmentally sensitive areas or that have high sewage flows may require addition site specific measures.

The Bypass criteria for the existing sewer main crossing McCarran Blvd is identified as:

Criterion 1 Bypass Pumping System with flows equal to or less than 2.5 MGD (1735 GPM)

Contractor shall maintain on site, the following minimum requirements for all bypass pumping systems:

1. Sufficient equipment and materials to ensure continuous and successful operation of the bypass and dewatering systems. The COMPLETE bypass system, including all piping, shall be continuously monitored by Contractor personnel.
2. A system of pumps and piping operating on site to maintain a minimum 50% over capacity of the anticipated maximum flow (as determined by the Contractor). In addition, the Contractor shall have a standby pump, equal in capacity to the largest pump in the system, piped, plumbed and ready for operation. Standby pumps shall be fueled and operational at all times.

3. The Contractor shall maintain on site a sufficient number of valves, tees, elbows, connections, tools, sewer plugs, piping, hoses and other parts of system hardware to ensure immediate repair or modification of any part of the system as necessary.

In areas where bypass piping crosses major streets, pipe must be laid in trench and backfilled with temporary trench patch. Ramps shall only be installed in locations approved by Engineer and for Criterion 1 use only.

Contractor shall have the entire bypassing system in place at each construction location and successfully tested for leaks before bypassing any sewage.

Prior to breaking down bypass ramps and/or hard piping, Contractor shall flush with potable water. Once flushed, hard piping shall be pigged using air to remove water.

The Contractor shall notify the Engineer 48 hours prior to commencing or shutting down any bypassing pumping operations.

Contractor shall repair, without cost to the City and/or private property owner, any damage that may result from their negligence, inadequate or improper installation, maintenance and operation of bypassing system, including mechanical or electrical failures. Contractor shall be responsible for immediate and proper cleanup should any spill occur, regardless of amount.

Engines shall be equipped with mufflers and/or plywood/Styrofoam noise panels enclosing the engines to keep the noise level within limits specified in local codes and ordinances.

All contacts between City's Maintenance Personnel and the Contractor on any sanitary sewer/storm drain matters shall be directed through the Engineer.

306.04.02.01 Submittals. The Contractor shall submit contract plans and complete design data showing methods and equipment proposed to be utilized in sewer bypassing for approval at the Pre-Construction Meeting. The submittal shall include the following information:

1. Written documentation indicating the scheme including location of pumps, temporary sewer plugs, bypass discharge lines, ramps, and lighting for ramps. The Submittal shall describe the method and location for draining the bypass pipelines upon completion of the work.
2. Capacities of pumps, prime movers, and standby equipment.
3. Design calculations proving adequacy of the system and selected equipment.
4. Standby power source.
5. Staffing plan.
6. Show suction and discharge points with elevations & stationing on the Contract Plans.
7. Provide pump performance curves.
8. Submit calculations to verify suction lift of pumps has not been exceeded.

9. Contractor shall submit proposed noise control and exhaust control plans for pumping equipment.
10. Contractor shall submit a proposed plan for disruption of sewer service laterals.

The actual design of the bypass arrangement shall be prepared by the Contractor or Subcontractor performing the work and shall be submitted to the Engineer to determine conformance to project objectives. The Contractor shall be responsible for any Subcontractors design (if used) on this project. Means and methods of accomplishing the bypassing shall be the responsibility of the Contractor.

Approval of submitted plans for sewer connection and temporary rerouting shall in no way relieve the Contractor of their responsibility for the protection of adjacent properties, downstream drainage systems and water tributaries against sewage spill. Any litigation, claims, fines, etc. associated with any sewage spill shall be the responsibility of the Contractor.

306.04.02.02 Protection. All bypass flows shall be discharged as approved by the Engineer. No bypassing to the ground surface, receiving waters, storm drains, or bypassing which results in soil or groundwater contamination or any potential health hazards shall be permitted.

All pumps, generators, and other equipment shall be placed on new plastic tarps to protect against gasoline, oil, and hydraulic fluid spills. Spills and leaks shall be cleaned up immediately.

306.04.02.03 Scheduling. The bypassing system may be shut down between shifts, on holidays or weekends, or during work stoppages. Contractor or Subcontractor responsible for bypass pumping shall have a representative on site whose only duty is to maintain and monitor the bypass pumping system until the bypassing of that specific pipeline is no longer required.

306.04.02.04 Flow Conditions. The Contractor is responsible for obtaining current flow condition information at the time of construction. The City is not responsible for any deviations in quantity of sewage flow at any time during the construction period. Higher flows may be encountered depending on weather and other upstream conditions.

306.04.02.05 Storm, Surface, Ground or Other Waters. It is anticipated that storm, surface and ground or other waters may be encountered at various times during the work herein contemplated. The Contractor, by submitting a Proposal, acknowledges that they have investigated the risks arising from such waters and has prepared their bid accordingly, and the Contractor by submitting a Proposal assumes all of said risk. All costs associated with said water shall be included in the applicable pipe installation bid items.

Disposal of groundwater into the storm drain system shall not be allowed without an approved groundwater discharge permit through NDEP.

The Contractor shall conduct their operation in such a manner that storm or other waters may proceed uninterrupted along their existing street and drainage courses. Drainage of water from existing catch basins and inlets shall be maintained at all times. Diversion of water for short reaches to protect construction in progress will be permitted if public or private properties are not damaged, or in the opinion of the Engineer, are not subject to probability of damage.

If public or private property becomes damaged by flood or other waters because of the Contractor's operations, the Contractor shall repair such damage to the satisfaction of the owner at the Contractor's expense. The Contractor shall obtain written permission from the applicable public agency or property

owner before any diversion of water will be permitted by the Engineer. The Contractor shall at their expense furnish and operate all necessary pumping equipment, drainage sumps, wellpoint systems and other drainage facilities wherever necessary in order to provide removal of water from the trench and construction area. Discharge of pumped water shall be at points approved by the Engineer.

306.04.03 Construction Debris. The Contractor shall in no way interfere with the operation of existing sewers, storm drains or other pipelines, except as specified herein and shall exercise every precaution to ensure that debris and material from construction operations do not enter the sewer system. Any debris or blockage entering into the sewer or storm drain as a result of the Contractor's work shall be immediately removed at the Contractor's expense.

306.04.04 Sewer Service Lateral Verification and Installation. The Contractor shall verify active or inactive (false tap) sewer service laterals by field reconnaissance, direct contact with users, CCTV observation (crawler and push type cameras), dye tracing, use of locator devices, excavation, or any other approved practical technique. All service laterals shall be reconnected except for the capped false taps shown on the improvement plans. Contractor is required to keep a log of active or inactive laterals with the address, method of determination, and date of determination. This log is required to be submitted with any pay request.

All sewer service lateral connections to new mains shall be reconnected by a "wye" fitting unless other means are required by these plans and specifications. All sanitary sewer service laterals shown on the Improvement Plans or located in the field prior to excavation shall be replaced with new PVC pipe from the point of connection at the mainline to the right-of-way. A new sanitary sewer "two-way" lateral cleanout shall be installed at the right-of-way and a clean connection shall be made to the existing lateral a minimum of eighteen inches beyond the cleanout. Any sanitary sewer service laterals damaged during construction shall be replaced at the Contractor's expense. All sewer service laterals that terminate in manhole structures shall be plugged at the manhole and rerouted to the sewer main per these Specifications.

306.05 Protection and Support of Existing Water Mains. Where trench excavation is located in close proximity to existing TMWA water mains and services the Contractor shall pothole and expose water facility. The Contractor shall coordinate with the TMWA inspector for direction on clearances and trench backfill requirements. TMWA inspector shall be on site at all times during excavation and backfilling TMWA facility crossings.

Contractor shall note in some locations, due to the depth of the proposed sanitary sewer crossing below existing large diameter (12" or greater) water mains, special construction techniques such as steel I-beam bracing and supports will be necessary to protect the existing water facility during construction activities. Contractor shall submit in writing shoring and bracing plans to TMWA for review and approval prior to any excavation under or adjacent to large diameter water mains.

306.06 Pipe Abandonment Grouting Material. Grout materials shall consist of cellular concrete with a minimum compressive strength of 300 P.S.I in 28 days when tested in accordance with ASTM C495 or C109. Grout material shall have less than 1% shrinkage by volume. The viscosity shall not exceed 20 seconds in accordance with ASTM C939 unless otherwise approved by the City Project Manager.

306.07 Basis of Payment. Refer to Bid Item Clarifications for various bid items.

SECTION 308 – AGGREGATE BASE COURSES

308.01 Description. This work shall consist of furnishing, placing and compacting aggregate base courses constructed in accordance with the requirements hereinafter set forth and in reasonably close conformity with the lines, grades, thicknesses and cross sections as shown on the Improvement Plans, Standard Details or in these Specifications.

308.02 Materials. Material used for Aggregate Base shall conform to Section 200.01.03 – “Crushed Aggregate Base” of the Standard Specifications and NDOT Silver Book Section 302.

Aggregate base used under all Portland cement concrete (PCC) structures including concrete curb and gutters, sidewalks, footings, slabs, driveways, alley aprons, PCC alley ways, valley gutters, and ADA ramps for the disabled shall be Type 2, Class B Crushed Aggregate Base.

Aggregate base used under all pipeline trench pavement replacement, and AC patch areas behind driveways and sidewalks shall conform to Section 200 of the Standard Specifications and NDOT Silver Book Section 302.

Aggregate base for roadway rehabilitation shall conform to Section 200 of the Standard Specifications and NDOT Silver Book Section 302.

308.07 Basis of Payment. There shall be no direct payment for supply, preparation, placement, and compaction of aggregate base improvements. Compensation for supply, preparation, placement, and compaction as specified to perform the construction operations shall be considered as included in other applicable bid items, and no additional compensation will be allowed to the Contractor

SECTION 311 CONCRETE STRUCTURES AND MASONRY CONSTRUCTION

311.01 Description. This work shall consist of furnishing and placing concrete and masonry for catch basins, manholes, foundations and similar structures. All concrete structures shall be constructed to the lines and grades given by the Engineer and in accordance with the design shown on the Improvement Plans.

311.02 Materials. Materials shall conform to the Improvement Plans and Section 202 of the Standard Specifications.

Cast-in place manholes shall conform to Section 311 of the Standard Specifications.

311.02.03 Manhole Concrete Collar, Frame and Cover. Sanitary Sewer manhole concrete collar, frame and cover shall comply with Plan Details. Typical cover shall be a 24” with City logo. Do not place traffic on concrete collars until the compressive strength of the concrete has reached a minimum of 3,000 psi, as measured by Test Method ASTM C39. Use the fast-setting concrete according to the manufacturer’s recommendations. Furnish a copy of the manufacturer’s installation recommendations before beginning the installation.

A curing agent conforming to the requirements of Section 200 of the Standard Specifications shall be applied to each collar section as it is finished.

Repair any cracks which occur in the fast-setting concrete.

311.03.01 Subgrade for Concrete Structures. Structural excavation and backfill shall be as specified in Sections 303 and 304 of these Specifications. All structures shall have a minimum of six (6) inches of Type 2 Class B aggregate base as provided in the Standard Specifications, except as noted on the plans. Manholes and structures constructed below the water table shall have a minimum of twelve (12) inches of Type 1 Class A aggregate base.

311.03.01A Backfilling around Manholes & Drop Inlets. Thoroughly compact the base or backfill material under the concrete collars around manholes and valves to not less than 90% of maximum density as determined by Test Method No. Nev. T101. The in-place density will be determined by Test Method No. Nev. T102 or T103.

311.10.01.01 Handling & Placing Concrete. Concrete shall be ready-mixed, supplied from an off-site commercial ready-mix plant approved by the Engineer. Each load shall be accompanied by a bonded weightmaster's certificate listing the quantity of each concrete ingredient, admixture quantity, water content and slump, and time of loading and departure from the plant. Notations shall be included which verify the drum was checked and found to be free of contaminants prior to batching, and number of drum rotations in transit.

Adding of water shall be under observation of the Engineer. Each mixer truck shall arrive at the site with its water tank full. In the event the water tank is not full, or the slump is greater than specified, the load may be subject to rejection. No water shall be added to placed concrete other than what would be used to maintain the cleanliness of tools utilized in the achievement of a smooth and even finish.

311.10.05 Placing Concrete under Adverse Weather Conditions. Contractor shall adhere to Standard Specifications Section 311.

311.23 Basis of Payment. Refer to Bid Item Clarifications for various bid items.

SECTION 312 – CONCRETE CURB, GUTTERS, POST CURB, SIDEWALKS, DRIVEWAYS, DRIVEWAY APRONS, ALLEYWAYS, PCC PAVEMENT, ADA PEDESTRIAN RAMPS, AND SIDEWALK CROSS DRAINS

312.01 Description. This Section covers the quality of materials within, and the proper construction of, concrete curbs, gutters, post curbs, sidewalks, driveways, aprons, and ADA pedestrian ramps.

312.02 Materials. Aggregate Base materials shall conform to Section 308 of these Specifications.

Concrete materials shall conform to Section 202 of the Standard Specifications. Concrete mix designs shall be submitted and approved by the Engineer prior to placement of concrete. **Concrete testing shall conform to Section 336.03.02 – “General Structural Use of Portland Cement Concrete” of these Specifications.**

312.08.01 Placement. Concrete curbs and gutters, sidewalks, and driveways shall be replaced to the original line and grade or as shown on the Improvement Plans. The Contractor shall match the existing top of curb and maintain the uniform flow line of the gutter. If a uniform flow line does not exist the Contractor shall establish a uniform flow line as directed by the Engineer. If the concrete curb height varies, there shall be No Direct Payment for the additional work and materials to match the existing sidewalk surface and/or the existing sections on either side of the replaced item.

Transverse expansion joints ½ inch wide will NOT be placed in the sidewalk unless otherwise directed by the City Project Coordinator. New sections of sidewalk shall be doweled into the existing adjacent concrete sidewalk with a minimum of two (2) No. 4 reinforcing bars equally spaced across the width of the sidewalk. Dowels shall penetrate a minimum of 4-inches into existing concrete. Epoxy will not be required.

The Contractor shall assure access to all driveways at the end of each shift by dropping the forms and/or placing steel plates. Newly placed concrete shall be protected from light duty passenger cars and pick-up trucks until a minimum of 3,000 psi strength is achieved. Construction equipment and/or heavier commercial vehicles (garbage trucks, delivery trucks, etc.) will not be allowed on concrete until the full design strength of 4,000 psi is achieved. There shall be No Direct Payment for this additional work if necessary for access to driveway or protection of concrete.

312.11 Curing. A curing agent conforming to the requirements of Section 202 of the Standard Specifications shall be applied to each section as it is finished.

312.12 Protection. Contractor shall conform to Section 312 of the Standard Specifications.

312.15 Basis of Payment. Refer to Bid Item Clarification.

SECTION 320 PLANTMIX BITUMINOUS PAVEMENT

320.01 Description. This work shall consist of furnishing all materials, equipment, and labor for the preparation, mixing, hauling, placement, and compaction of plantmix bituminous pavement, as specified, and/or as directed by the Engineer.

Within City of Sparks right-of-way, if trench edges for longitudinal excavations fall within a travel lane, the entire travel lane outside the trench shall be cold milled to a depth of two inches and overlaid with two inches of dense grade plantmix bituminous pavement as shown on the Construction Drawings.

Plantmix Bituminous Pavement to be used for all temporary asphalt patches within City of Sparks right-of-way and permanent asphalt patches within the City of Sparks right-of-way shall conform to Section 201 – “Bituminous Plantmix” of the Standard Specifications.

The Contractor shall install a 4-inch temporary HOT MIX patch over exposed utility trench excavated areas at the end of each work day. Cold mix asphalt is not permitted on this project. The finish surface of the temporary hot mix patches shall be free from ruts, humps, depressions or irregularities. It is the responsibility of the Contractor to maintain all temporary hot-patches or cold patches until the permanent asphalt patch is placed or roadway reconstruction has started.

320.02 Materials. Bituminous Plantmix materials shall conform to Standard Specifications and Improvement Plans.

320.03 Construction – City of Sparks Right-of-Way (NDOT Right-of-Way)

The Contractor shall install Permanent Patch over exposed utility trench excavated areas on street segments not listed for reconstruction which are identified on Improvement Plan Sheets and the following shall apply:

Prior to Permanent Patching, sawcuts shall be made a minimum of 12-inches (City R.O.W) or 18-inches (NDOT R.O.W.) beyond each side of trench and permanent patch shall be constructed to match the

thickness of the contiguous pavement, but in no instance shall the patch be less than eight (8) inches in depth or greater than twelve (12) inches in depth.

1. Saw cuts that extend into the existing pavement surface that was not removed shall be filled with a crack sealant compound such as CRAFCO 222 or equivalent, as approved by the Engineer.
2. If sawcut is within two (2) feet from the gutter lip line, then the contractor shall remove the pavement to the gutter lip line and place Permanent Patch.

Road rehabilitation shall have a minimum of six inches (6") of Bituminous Plantmix.

320.04.02 Aggregates. Hydrated lime (hereinafter referred to as mineral filler) shall be added to all plantmix bituminous aggregates at not less than one and one-half percent (1.5 %), nor more than two and one-half (2.5%) of the weight of the dry aggregate.

Lime Marination. Aggregate for Plantmix Bituminous Pavement shall be Type 2C, per Standard Specifications Subsection 200.02.02. The preparation of the aggregates shall be accordance to the requirements outlined in Subsection 401.03.08 – Preparation of Aggregates, of the Nevada Department of Transportation (NDOT) Standard Specification for Road and Bridge Construction, latest addition. The mineral filler shall be added as summarized in subsection 401.03.08, 1. Marination Method.

320.05 Spreading and Finishing. Plantmix bituminous pavement shall be laid in courses (lifts) as shown in the Contract Documents. The thickness of each course shall not exceed four (4) inches, nor be less than two (2) inches.

Tack coat shall be applied between paving courses in accordance with Section 316 – “Tack Coat” of these Specifications.

320.05.02 Joints. This subsection shall only apply to plantmix bituminous pavement placed in the City of Sparks right-of-way.

The Contractor shall minimize the number of transverse joints in the final lift of pavement in any particular roadway segment. Final lift of paving from the lip of gutter (or edge of pavement at the shoulder in intersecting street) to centerline shall be "hot" joints (joints which are placed such that the adjacent paving lifts are placed during the same work shift, when previously placed pavement is relatively hot"). The Contractor may be required to remove and replace top lift pavement that does have “hot joints”.

When the abutting lane is not placed the same day, or if the joint is distorted by traffic or other means during the days work, the lift shall be prepared as follows before paving adjacent to the "cold" pavement:

- A. Sawcut back a minimum of six (6) inches horizontally and to full depth of the lift.
- B. All joints (sawcut or otherwise) shall be offset.
- C. A tack coat of asphaltic emulsion shall be applied to the contact surface prior to placement of the abutting lift.

320.06.02 Density. This subsection shall only apply to plantmix bituminous pavement placed in the City of Sparks right-of-way.

Compaction after rolling shall be at least ninety-six percent (96%) of the density obtained with the Marshall Apparatus as per ASTM D-1559 on all asphalt paving except the stabilizing asphalt. Asphalt concrete

paving will be accepted for density on a “lot” basis. A lot will consist of five hundred (500) tons of asphalt concrete or any portion thereof exceeding one hundred fifty (150) tons. Final densities will be determined from core samples.

320.06.04 Voids. Plantmix Bituminous Pavement , Type 2C with lime, PG 64-28NV, 75 Blow- 4% Voids shall be used for all asphalt lifts in pavement overlays and permanent patches. Open Grade plantmix bituminous pavement shall be inlayed one-inch (1”) in all areas within NDOT right-of-way as designated on the Improvement plans. Open Grade materials shall conform to NDOT Silver Book, Section 403.

320.07 Mitigation of Unacceptable Plantmix Bituminous Pavement

320.07.02 Unacceptable Density. This subsection shall only apply to plantmix bituminous pavement placed in the City of Sparks right-of-way.

The Engineer will consider input from the Contractor, the materials testing lab, and sound engineering analysis and judgment before requiring mitigation (i.e. removal and replacement, increased thickness, or surface treatment) and/or payment reduction for plantmix bituminous pavement which deviates from specified target ranges. The Engineer may, upon consideration of the specific circumstances, reduce or waive mitigation and/or pay reduction, or combine portions of mitigation and pay reduction.

If the Engineer makes a preliminary determination that mitigation, and/or pay reduction is necessary, the Contractor may submit a written request to the City for retests. The retests may be performed by the City’s testing consultant, or by any other approved independent testing laboratory. The Contractor shall submit a written request to the City for the approval of the laboratory. Retests shall be undertaken at the Contractor’s expense. If the result of any retest is significantly different from initial testing, an independent testing laboratory that is mutually acceptable to the City and the Contractor will perform a “referee” test. Fifty percent (50%) of the cost of the “referee” tests shall be paid by the City and fifty percent (50%) shall be paid by the Contractor. The City may elect to make full payment, and deduct the Contractor’s fifty percent (50%) from progress or final payment to the Contractor. The City shall make a final determination regarding mitigation and/or pay reduction based upon the preponderance of test results, and other factors.

320.09 Basis of Payment. Refer to Bid Item Clarification.

SECTION 323 ADJUSTMENT OF MANHOLES, CATCH BASINS, UTILITY VAULTS, UTILITY BOXES, SURVEY MONUMENTS, AND ALL WATER AND GAS VALVES TO FINAL GRADE

323.01 Description. This work shall consist of all labor, equipment and materials necessary to adjust new and existing manholes, catch basins, utility vaults, utility boxes, survey monuments, water and gas valves, and similar structures to final grade.

323.02 – General. Work shall conform to Standard Specifications Section 323 – “Adjustments of New and Existing of Manholes, Catch Basins, Utility Vaults, Utility Boxes, Water and Gas Valves, and Monuments to Final Grade”. In addition to the Standard Specifications, it shall be the responsibility of the Contractor to reference, locate and make all necessary adjustments, either temporary or permanent, to maintain adequate accessibility of water and gas valves, utility vaults and pump stations at all times during construction. The Contractor shall be responsible for any damages incurred to the facilities being adjusted. Before lowering manholes, valves and vaults, the Contractor shall take inventory of the utilities to be adjusted. The Contractor shall record the exact location and type of utility by labeling the assembly with

numbers at locations visible for verification. The labeling shall include utility site, collar, and lid to ensure proper match of hardware when utility adjustment is completed at the conclusion of the project.

Prior to lowering any sanitary sewer and/or storm drain manholes the Contractor shall provide a "Debris Containment Plan" to the Engineer. This plan shall contain the type of debris catcher the Contractor will use and the emergency contact phone numbers. Lowered sanitary sewer and/or storm drain manholes shall include temporary manhole covers that conform to City of Sparks's Standard Detail S-209B.

The Contractor shall submit the utility inventory list to the Engineer and utility companies upon completion of utility lowering activity. The Contractor shall also keep a copy of the utility location inventory list on the project work site in water proof container at all times for emergency shutoff purposes.

It shall be the responsibility of the Contractor to make all necessary adjustments, either temporary or permanent, and to maintain adequate accessibility of water and gas valves, manholes, utility vaults and pump stations at all times during construction. The Contractor shall be responsible for any damages incurred to the facilities being adjusted. The Contractor shall adhere to construction standards of the owning utility and only install materials per their current specifications. The TMWA and NV Energy will provide replacement materials for items that have either deteriorated or become obsolete. The Contractor shall install said items.

323.02.01 Verification of Depth. The locations of underground facilities shown on the plans are approximate and were not determined by field investigation. It shall be the responsibility of the Contractor to locate all existing utility structures, whether shown or not, and to notify all utility companies to verify in the field the location of their installations prior to construction. The Contractor shall protect all utility structures from damage. The expense of repair or replacement shall be borne by the Contractor (however, this in no way precludes the Contractor from recovering, from the utility company, costs to repair existing utilities which do not conform to Standard Specifications or Details). The Contractor shall request field marking of existing utilities at least forty-eight (48) hours in advance of beginning construction by calling Underground Service Alert at (800) 227-2600 or 811.

The Contractor is cautioned that telecommunication cables and equipment may also be located within the project area limits. The Contractor will make every effort to locate and protect said cables and equipment. The Contractor is responsible for field verification of utilities and any damage to said utilities due to their work.

The Contractor is also cautioned that some of the existing manholes cones may be within the new asphalt section and the contractor may have to modify the paving/patching operations to accommodate this obstruction in the grade.

323.02.02 Materials.

City of Sparks. Sewer and storm drain frame and covers shall conform to City of Sparks Standard Details S-209A. It is the Contractor's responsibility to inspect all new manhole frames and covers for defects, deformities, and/or warping to prevent "ratting" or knocking" of covers to frames. All defective frames and covers shall be replaced at no cost to the City and the Engineer shall be notified of such replacement.

TMWA

Water valve boxes shall be six-inch (6") cast iron marked "Water". Test station boxes shall be six-inch (6") cast iron marked "Water". Flush valve assembly boxes shall be Christy G5 Traffic Valve box marked "Water". Water valve box material not conforming as specified shall be replaced. TMWA will provide contractor with replacement material provided material being replaced was not damaged by the Contractor.

The contractor shall notify and include TMWA in meeting minute updates, schedule updates, and in the punchlist and final project walkthroughs to ensure all valve adjustments have been appropriately completed.

Nevada Energy, NVE Gas

Gas valve boxes shall be six-inch (6") cast iron marked "Gas". Test station boxes shall be six-inch (6") cast iron marked "Gas". NVE will provide Contractor with replacement material provided material being replaced was not damaged by the Contractor. The contractor shall notify and include NVE in meeting minute updates, schedule updates, and in the punchlist and final project walkthroughs to ensure all valve adjustments have been appropriately completed.

323.04 Abandonment and Adjustment of Existing Structures. The area around the structure to be abandoned shall be restored to match the surrounding area, including permanent patching or as directed by the Engineer. All abandoned pipes/conduits shall be plugged or removed per Section 301 – "Removal of Existing Improvements" of these Specifications. Manhole structures shall be abandoned per the Construction Drawings.

323.07 Basis of Payment. Refer to Bid Item Clarifications.

SECTION 324 PAINTING, PAVEMENT STRIPING, AND MARKING

324.01 Description. This work shall consist of the preparation of surfaces to be painted, pavement to be striped and/or marked, and the application, protection, and drying of the required number of coats of paint of the kinds and at the points specified or ordered by the Engineer.

324.02 Materials.

Permanent striping shall be Type II, waterborne paint.

Temporary striping may consist of traffic paint. Permanent Linear Pavement Markings will require two (2) coats of full width/thickness paint.

324.03 Construction. Application of permanent pavement markings on the completed pavement shall conform to Section 632 – "Permanent Painted Pavement Markings" of the Standard Specifications for Road and Bridge Construction, Nevada Department of Transportation, latest edition.

Prior to application of temporary striping or markings, it shall be necessary to completely obliterate existing markings in such a manner so as to leave no residue or other trace of the former line that may be misconstrued by a driver to be a traffic line under any condition of daylight, darkness, or wetness of pavement. Use of gray or black paint to cover existing markings shall not be an acceptable method of obliteration.

The placement and maintenance of temporary striping and tabs shall be considered incidental to the project.

During construction, Contractor shall provide temporary pavement markings and striping to areas damaged by construction operations and shall be considered incidental to the project.

Contractor shall inventory existing striping locations, lane widths, crosswalks, stop bars, yield bars, storage lanes, and symbol markings prior to construction. Contractor shall obtain City of Sparks approval and Engineer's review of the permanent striping layout prior to final installation.

If the Contractor elects to increase the extents of the pavement replacement the additional pavement striping and markings shall be replaced in-kind at no additional cost to the City.

Contractor shall grind existing thermoplastic symbols and markings that are proposed to be replaced per the striping plans which are outside of the repaving limits. Grinding shall be done in such a manner that the underlying surface shall sustain minimal scarring, gauging, or damage. Excessive damage to the asphalt surface may require full depth pavement removal and replacement. In addition, the contractor shall replace any striping that has been damaged or removed due to construction that is not identified on the striping plans at no additional cost to the City.

324.13 Basis of Payment. Refer to Bid Item Clarifications.

SECTION 334 MONUMENTS

334.01 Description. This work shall include the removal and replacement of monuments disturbed during construction.

334.02 Materials. All materials within City of Sparks right of way shall conform to Section 334 – “Monuments” of the Standard Specifications. The contractor will provide the survey caps and shafts to the City for “P.L.S.” scribing prior to installation.

334.03 Construction. All construction within City of Sparks right of way shall conform to Section 334 of the Standard Specifications. The Contractor's attention is directed to the dimensions and tolerances specified in the Standard Details and these Special Provisions. The Contractor shall remove and re-install the monument at the Contractor's expense whenever these dimensions and tolerances are not complied with, to the satisfaction of the Engineer.

The concrete base shall be cast-in-place in a neat hole without the use of forms. The exposed surface of concrete and the top surface of the concrete base shall be uniform, of even texture, and shall be free of holes, cracks, and chipped edges.

The metal shaft with the nonferrous cap permanently attached shall be placed before the concrete has acquired its initial set and shall be firmly embedded in the concrete. Smooth shafts shall be deformed to resist twisting or removal. The concrete shall be so located that when the metal shaft and cap is inserted in the center of the concrete, the reference point shall fall within a 1-inch diameter circle at the center of the cap.

The cast iron well or "pot" shall be placed so that the inside edge of the well is no less than one (1) inch from the edge of the cap.

The roadway paving shall be cut or formed so that when the concrete is placed between the "pot" and paving it forms a smooth concentric circle.

334.03 Punching/Scribing. All punching/scribing shall conform to Section 334 of the Standard Specifications. Final punching of the monumented reference point shall be performed by a professional land surveyor (PLS), provided by the City, a minimum of 24 hours after the metal shaft has been placed in the concrete.

334.05 Basis of Payment. Refer to Bid Item Clarifications.

SECTION 335 – CLEANUP

335.01 Description. This work shall include the cleanup of construction areas.

335.02 Scope of Work. After all of the work on the Improvement Plans and in these Specifications is completed and before final acceptance of the project, the entire construction area, including the roadbed, parking, sidewalk areas, shoulders, driveways, alleys, side street approaches, slopes, ditches, sewer trenches and construction areas shall be neatly finished to the lines, grades, and cross-sections shown on the Improvement Plans as hereinafter specified.

335.03 Pavement Surfaces. A street sweeper vacuum truck must be used to clean the roadway section. A power broom with a water truck will not be an acceptable means of cleaning the site. Throughout all phases of construction, including suspension of work, and until final acceptance of the project, the Contractor shall keep the work site clean and free from rubbish and debris. The Contractor shall also abate dust nuisance by cleaning, sweeping and sprinkling with water, or other means necessary. The use of water resulting in mud or ice on public streets will not be permitted as a substitute for sweeping or other methods.

All backfill, aggregate or waste materials being hauled to or from the construction site shall be covered with a canvas or plywood material to prevent dust from entering the atmosphere. Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately and the area cleaned.

All new and existing catch basins and DI where BMP devices are installed, the BMP shall be completely removed and disposed. The inside and surrounding surface of the catch basin and/or DI shall be vacuumed and cleaned at the completion of the project per the requirements of Section 342 – “Storm Water Protection” of these specifications.

All sanitary and storm drain manholes (new or existing) within the limits of construction or manholes where construction activity was present shall be vacuumed and cleaned at the completion of the project to the requirements of Section 342 – “Storm Water Protection” of these Specifications.

During winter months Contractor shall continuously monitor construction water flow across streets and sidewalks, if water freezes at any time during construction operations, Contractor shall immediately cover the frozen surface with sand. Within four (4) hours of frozen surfaces thawing, Contractor shall remove sand.

If, in the opinion of the Engineer, the roadway section is not being kept clean during construction activities, then the daily SWPPP bid item cost will be forfeited by the Contractor for each day the street section is not cleaned. See Section 342 – “Storm Water Protection” of these Specifications for SWPPP requirements.

335.05 Basis of Payment. There shall be no direct payment for cleanup work. Compensation for cleanup work as specified to perform the construction operations shall be considered as included in the price bid for other items of work and no additional compensation will be allowed the Contractor.

SECTION 337 PHOTOGRAPH AND VIDEO RECORDING

337.01 Description. Work shall consist of the Contractor providing photographs in digital format (.jpg, .png, or other approved format as approved by the Engineer) and digital video recordings in MPEG-2 format documenting conditions prior to and post construction. Photographs and color DVDs are intended for use as indisputable evidence in ascertaining the extent of any damage which may occur as a result of the Contractor's operations and are for the protection of the Contractor and the City, and will be a means of

determining whether and to what extent damage, resulting from the Contractor's operations, occurred during the contract work.

337.02 – Document Materials and Procedure. The photographs and digital video are intended for use as indisputable evidence in ascertaining the extent of any damage which may occur as a result of the Contractor's operations and are for the protection of the private property City, the Contractor and the City, and will be a means of determining whether and to what extent damage, resulting from the Contractor's operations, occurred during the Contract work.

Photographs shall be digital color printed and shall indicate on the back of each print the date, name of work and location where the photograph was taken. One print of each digital photo together with the digital file shall be delivered to the Engineer within five days following each set of photos. The photographer shall be qualified and equipped to photograph either interior or exterior exposures, with lenses ranging from wide angle to telephoto. Digital photo files shall be provided on a USB flash drive.

Digital video shall be color, provided on compact disk and shall indicate on the disk and the box the date, name of contract, and the location where the tape was recorded. The digital video should contain an audio track which narrates the progression of the video through the site. All video must display index counter, date and time of recording, and house address. One copy of each video shall be delivered to the Engineer within five working days. The videographer shall be qualified and equipped to videotape either interior or exterior, with lenses ranging from wide angle to telephoto.

Contractor shall maintain a copy of site examination documentation for the duration of the work and the warranty period.

Upon receiving Notice of Contract Award from the Engineer, Contractor shall provide a pre-construction digital video recording taken along the proposed routing of the entire project, including staging and storage areas, and sewer and bypass piping routes, showing pre-construction conditions (including USA Locate markings and adjacent property improvements, such as sidewalks, wall, fences, landscaping, valves, etc.). Digital videoing shall not take place until all USA utility locates have been performed.

No construction at each location shall start until the pre-construction video recording has been completed and submitted to the Engineer.

Photographs shall be provided during construction to show all utility crossings, excavations for pipe, installation of pipe and cleanouts, removal and restoration of surface features such as trees, shrubs, rock retaining structures, fences, bricks, and stepping stones, and any items of special interest upon the request of the Engineer.

Provide photographs taken on cutoff date for each scheduled application for payment.

Upon completion of the work at each site, the Contractor shall perform the digital video recording again. The recordings shall be taken from the same points and in the same direction as the pre-construction video. The post construction video shall be made within fourteen (14) days after the acceptance of the project by the City.

After the post-restoration video and photographs are taken, a copy will be provided to the Engineer. The Engineer will ascertain the extent of any damage, and will determine whether improvements, damaged or removed during construction, have been returned to specified or original condition. Final payment shall not be made until the Engineer has determined that the construction site meets or exceeds the specified or original condition, and the Contractor has received the signed release form from the private property Owner.

337.03 Submittals. This section specifies photographs and digital video recordings of all surface features in all construction areas to be provided by the Contractor before, during and after construction.

Engineer will review video and photographs for quality. The Contractor will be responsible for modifications to their equipment and/or inspection procedures to achieve video and photograph material of acceptable quality. No work shall commence prior to approval of the material by the Engineer.

The Contractor shall submit the following information for review at the pre-construction meeting following notification of award of the contract:

1. Pre-construction digital video shall be submitted to the Engineer at the Pre-Construction Meeting.
2. Photographs and videos taken during construction shall be submitted with each application for payment.
3. Post-restoration photographs and video shall be submitted to the Engineer with fourteen (14) days after acceptance of the project.

337.05 Basis of Payment. There shall be no direct payment for photograph and digital video recording. Compensation for photograph and video recording as specified to perform the construction operations shall be considered as included in the price bid for other items of work and no additional compensation shall be allowed the Contractor.

SECTION 342 STORM WATER PROTECTION (RUN OFF CONTROL PLAN)

342.01 Description. This work shall consist of furnishing all materials, equipment and labor for erosion controls, installation and maintenance of storm water protection devices, street sweeping, protection and cleaning of storm drain structures throughout the duration of the project. Conforming to the requirements of this section does not relieve the contractor of the cleanup requirements in as described other sections of the contract documents. This section does not include requirements for groundwater disposal and/or treatment as described in Section 306 – “Storm Drain, Culverts, and Sanitary Sewer Construction” of these specifications.

342.02 Standards. All construction activities, procedures and devices shall conform and incorporate Nevada Department of Environmental Protection (NDEP) Best Management Practices for Storm Water Management as supplemented by the most current version of Truckee Meadows Construction site best management practices handbook (BMP handbook) and in accordance with the Federal Clean Water Act.

342.03 Requirements

Storm Water Pollution Prevention Plan (SWPPP)

The contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the procedures set forth by the Nevada Department of Environmental Protection (NDEP). All inspections, maintenance activities or other repairs shall be documented and kept it on site at all times. At minimum documentation shall be submitted to the Engineer every 7 days, prior to forecasted rain events and within 24 hours after any rain event that creates runoff. Documentation shall be in the submitted on the “Construction Site Inspection Checklist” provided in Appendix D of the BMP handbook. Contractor shall also submit maps, photographs and/or narratives to explain maintenance and/or repair to BMP devices. In

addition to the SWPPP the contractor shall prepare a plan describing the procedures and practices where construction activities may pollute storm water runoff or discharge into the storm drain system.

City of Sparks has submitted for an NDOT Temporary Encroachment Permit and is pending final approval based on submission of the SWPPP (Run Off Control Plan). Contractor will be responsible to provide a comprehensive plan for approval, suitable for use within both the city of Sparks and NDOT Right-of-Way.

Storm Water Pollution Prevention Plan (SWPPP)- *Supervisor*

The contractor shall assign one qualified individual as a storm water protection supervisor whose responsibility shall be the installation, maintenance and documentation of storm water protection for the duration of the project. The storm water protection supervisor shall be a person other than the Contractor's superintendent, foreman, or equivalent supervisory position and shall be available to the Engineer 24 hours a day, 7 days a week.

Storm Water Pollution Prevention Plan – DAILY Compliance

The following are the minimum requirements that contractor shall be responsible for providing and maintaining each day for the duration of the project:

1. Supervision and coordination of the SWPPP. The Contractor shall effectively supervise, monitor, maintain and document all activities required. The supervisor shall be available to respond to all calls from the City and all inspection personnel 24 hours a day, 7 days a week for the duration of the project.
2. Installation of effective BMP's and maintenance of all BMP's including erosion control measures required in all non-paved areas.
3. Clean and swept haul routes, work zones, stockpiling and staging areas. The expectation is that the contractor will keep these area clean and swept at all times.
4. Protection and cleanup of all sawcutting slurry. The Contractor shall remove and properly dispose of all waste products (slurry) generated by said cutting operations immediately as sawcutting operations occur. The discharge of any water contaminated by waste products from cutting operations to the storm drain system is prohibited.
5. Concrete washout station. The Contactor shall be responsible for providing a concrete washout structure for the purpose of cleaning concrete tools and equipment. Concrete trucks shall utilize washout for disposing excess concrete and cleaning of shoots. Washing out on exposed ground or paved surfaces shall not be allowed. Washouts must be cleaned, vacuumed and material disposed as required. At the end of each shift washout must be covered and secured.
6. Sweeping of all surfaces. Sweeping shall be required for all operations throughout the duration of the project. All surfaces shall be swept throughout the day and the swept material shall be removed from the site immediately. Sweeping only at the end of the shift does not fulfill this requirement. Sweepers shall be fully functional, self-contained, and capable of collecting sediment and using minimal water while sweeping to minimize dust. City of Sparks Fire Hydrants shall not be used to fill sweepers. The use of kick brooms shall not be acceptable. Manual hand sweeping and hand pick up may be necessary to supplement the use of street sweepers. Flushing off paved surfaces with water is prohibited with the exception of water that necessary to satisfy the requirements of Section 100.49 Washoe County Dust Control permit.

7. Full-time sweeping during grinding, pulverizing, asphalt patching and paving operations. During these construction activities the contractor shall provide sweeping for the entire working shift and after shift until paved surfaces are cleaned to the satisfaction of the City of Sparks. Asphalt products including, but not limited to, grindings, chip seals, slurry seals, fog seals and tack coat must not be allowed to enter any storm drain system or water course. The covering of drainage inlet structures, catch basins and manhole with filter fabric may be necessary to accomplish this. Plastic materials shall be placed under all asphalt paving equipment when cleaning and storing. Plastic materials shall also be placed under equipment leaking fluids.
8. Clean and vacuum of sanitary and storm drain structures. At the completion of each Area of the project, all BMP's shall be removed and disposed. In addition, the inside and surrounding surface of the catch basin and/or drop inlets and all sanitary and storm drain manholes shall be vacuumed and cleaned to the satisfaction of the City of Sparks.

342.05 Basis of Payment. There shall be no direct payment for storm water protection. Compensation for the storm water protection as specified to perform the construction operations shall be considered as included in the price bid for other items of work and no additional compensation shall be allowed the Contractor.

349 TRAFFIC CONTROL

349.01 Description. This work within the City of Sparks Right-of-way shall consist of furnishing all materials, equipment and labor to maintain proper traffic routing, parking control, access to all residences and businesses, and public safety for the duration of the project. All construction traffic control plans shall conform to the latest editions of either the NDOT Work Zone Traffic Control Handbook or Part VI of the MUTCD. All signs and barricades shall conform to Section 332 of the Standard Specifications, these Special Provisions, Construction Plans, Part VI of the MUTCD, and/or said Handbook, where applicable.

City of Sparks has submitted for an NDOT Temporary Encroachment Permit and is pending final approval based on submission of a traffic control plan for use within NDOT Right-of-Way. Contractor will be responsible to provide a comprehensive plan for approval, including all revisions to the satisfaction of NDOT.

Flag persons shall be used during working hours to control traffic flows in accordance with the NDOT Work Zone Traffic Control Handbook and as directed by the City Project Coordinator.

Traffic control signs shall include the names of the streets involved for detour or closure.

“Road Construction Ahead” signs shall be replaced with either the Road Work Ahead sign (W20-1). No “Road Construction Ahead” signs shall be allowed on the project.

All streets shall be open for normal traffic movement during night time and weekend periods, unless previously approved by the City Engineer. The closure of any two adjacent parallel streets at the same time is prohibited. A street will be considered closed to through traffic if it is barricaded, or a closed sign is posted on any portion of the street, including intersections of crossing streets.

The storage of construction materials within the public streets and alleys during nighttime and weekend periods is prohibited.

A minimum of two (2) working days written notification shall be given to adjacent residents, businesses, Police and Fire Departments, paramedic/ambulance services, Waste Management, and the City Project Coordinator, of planned street closures and when parking restrictions are required. Where work is being performed along Citifare bus routes, the Regional Transportation Commission shall also be notified in similar fashion. Such notification shall be made separately for each work site and shall be made each time work commences at that site when operations are intermittent. This notification shall state the date work will commence and the hours and days to be worked. When construction will necessitate traffic control affecting access to any hospital, forty-eight (48) hours notification and coordination will be given in person mutually by the Contractor and the City Project Coordinator.

Contractor will be required to provide safe pedestrian access which may include but is not limited to signs, fencing, flaggers etc. Contractor will be required to provide a pedestrian safety plan to the City for review prior to the commencement of work.

The Police Department will not enforce parking restrictions indiscriminately applied. A "No Parking" notification, supplied by the contractor, shall be applied only as and when needed, and shall be removed unless absolutely necessary.

The Contractor shall submit a Project Work Schedule and a detailed Traffic Control plan to the City Project Coordinator five (5) working days prior to the pre-construction conference. Prior to the start of construction the Contractor must have a Traffic Control plan approved by the City Project Coordinator.

Any signs, barricades, or barriers which are necessary for night time hours or poor visibility shall utilize warning lights as specified in the latest editions of either the NDOT Work Zone Traffic Control Handbook or Part VI of the MUTCD.

The Contractor shall coordinate Traffic Control with the Sparks Police Department with respect to any special events that may be affected by construction activities.

The Contractor shall notify Sparks Dispatch ((775) 353-2231) 24 hours prior to any scheduled detour.

The Contractor shall be responsible for Traffic Control until such time as any street markings eradicated by the work are replaced with permanent markings. The Contractor shall be required to provide and install any temporary pavement markings as required and these shall conform to spacing and other requirements as established by the City.

The approval by the Project Coordinator of the submitted Traffic Control Plan shall in no way relieve the Contractor of his responsibility for safety requirements conforming to Section 22 of the Special Provisions. Failure to comply with any specification herein or with direction from the City Project Coordinator may result in a stoppage of work until compliance is restored.

The intersection of Probasco Way and E Quail Street may be closed for bypass pumping setup and equipment for installation of sewer main from SSMH#SSN003272 to SSMH#SSN003281 only. Bypass pumping setup will not be allowed in that intersection for the remainder of the installation, unless approved by the City of Sparks Project Manager.

349.04 Basis of Payment. Refer to Bid Item Clarifications.

APPENDIX A

TRUCKEE MEADOWS WATER AUTHORITY

GENERAL CONDITIONS

APPENDIX A

SANITARY SEWER IMPROVEMENT PROJECT – MCCARRAN BLVD. & PRATER WAY BID #24/25-0012, PWP# WA-2025-205

GENERAL CONDITIONS

****When Truckee Meadows Water Authority (TMWA) and City of Sparks General Conditions conflict, City of Sparks General Conditions supercede****

ARTICLE 1: DEFINITIONS AND TERMINOLOGY – NOT USED

ARTICLE 2: GENERAL AND PRELIMINARY ITEMS – NOT USED

ARTICLE 3: CONTRACT DOCUMENTS – NOT USED

ARTICLE 4: PHYSICAL CONDITIONS, LANDS, REFERENCE POINTS

4.01 Availability of Lands – Not Used

4.02 Site Investigation and Conditions Affecting the Work – Not Used

4.03 Differing Conditions – Not Used

4.04 Reference Points – Not Used

4.05 Hazardous Environmental Conditions

- A. In the event the Contractor encounters on the site material reasonably believed to be asbestos, petroleum products, or any other material subject to regulation by laws or regulations (hereinafter “Hazardous Materials”) which has not been rendered harmless, the Contractor shall immediately stop Work in the area affected and report the condition to TMWA in writing. The Work in the affected area shall not be resumed until the hazardous material is removed or rendered harmless.
- B. The Contractor will not be required to perform any Work relating to Hazardous Materials. In proportion to its negligence, but in no event exceeding liability limitations created pursuant to NRS Chapter 41, TMWA will indemnify and hold harmless the Contractor and its employees, from and against claims, damages, losses, and reasonable expenses, including but not limited to reasonable attorney’s fees, directly resulting from TMWA’s negligence in discharging or knowingly failing to disclose the presence of Hazardous Materials in the Contractor’s Work area.
- C. The Contractor shall not knowingly incorporate into the site or into any building, building component or structure, or otherwise leave on site any Hazardous Materials.

1. If the Contractor discovers any such Hazardous Materials either on site or incorporated in the Work, it shall in writing immediately notify TMWA who shall take appropriate action to alleviate the problem.
 2. TMWA may require the Contractor to furnish, from time to time, a certification that to the best of the Contractor's knowledge and belief it has not incorporated into the site or building any Hazardous Materials.
- D. To the fullest extent permitted by law, the Contractor shall indemnify, defend, protect, and hold harmless TMWA, its agents and employees from and against claims, damages, losses, liabilities, and expenses, including but not limited to attorneys' fees, arising out of or resulting from the Contractor, its agents, employees, or anyone for whose acts Contractor may be liable, knowingly or negligently incorporating into the site or the Work or leaving on the site any Hazardous Materials. Such indemnity obligation shall not negate, abridge, or reduce any other rights or obligations of indemnity, which would otherwise exist.

4.06 Asbestos Cement Pipe (ACP, AKA Transite) Requirements

- A. Contractor may be required to handle, disturb, or remove certain water pipes constructed of asbestos-containing materials regulated as a potentially hazardous material as part of the Work. Please refer to section 5.02-H-4 for insurance requirement. Pipe constructed of asbestos material which has not been cut, damaged, tapped, or removed during performance of the Work, shall not be deemed "Hazardous Materials" for purposes of these General Conditions.
- B. If the Contractor is required to cut, remove, or tap pipe constructed of asbestos materials as part of the Work, or if the Contractor otherwise damages or cuts pipe constructed of asbestos materials during the Work, Contractor must utilize the services of personnel or a subcontractor that has received specialized OSHA training in the handling and disposal of asbestos to perform any Work on such pipe, including cutting, tapping, repairing, or removing. Only employees trained and currently certified in the handling and disposal of asbestos-containing materials shall conduct any work related to the removal, storage, and disposal of asbestos material.
1. The Contractor shall be required to provide current asbestos abatement certificate submittals for each employee that will conduct work on pipe constructed with or containing asbestos materials. The supervisor of the work shall have current NV OSHA Supervisor qualifications for asbestos abatement. (OSHA 40 hr. Asbestos Contractor Supervisor). Should the Contractor not hold the required supervisory designation, any third-party personnel contracted to provide these services must hold a NV Asbestos Monitor License (OSHA 40hr. Monitor).
 2. Any work on the removal of pipe constructed of asbestos-containing materials by unauthorized employees not currently certified shall result in an immediate stop work order with no additional cost to TMWA for standby time, added delays, backfilling/re-excavation, steel plates and/or any work needed to secure the site until properly trained personnel can complete the work.
- C. Any disturbance, removal, disposal, handling, or Work activity on pipe constructed of asbestos-containing materials must be done in strict compliance with applicable Laws and Regulations (OSHA, Washoe County, and these requirements) governing the safe handling practices for

disturbance, removal, handling and disposal of asbestos-containing material, and Contractor shall be solely responsible for all costs and actions necessary to comply with such Laws and Regulations.

1. Contractor shall provide the disposal manifest to the TMWA inspector showing all pipe constructed of asbestos-containing materials has been disposed of in accordance with all applicable Laws and Regulations. Contractor shall indemnify and hold TMWA harmless from any claims, injuries, demands, or liabilities arising from Contractor's handling, removal, disposal, or Work on or about pipe constructed of asbestos-containing materials.
 2. Contractor shall also fill out the EPA NESHAP (National Emissions Standards for Hazardous Air Pollutants) form and shall notify Northern Nevada Public Health Air Quality Management Division. TMWA can provide the contractor the form upon request.
- D. Asbestos Abatement, Handling, Storage and Disposal Plan (AAHSD): The Contractor shall be required to provide a AAHSD submittal that a minimum shall contain the following:
1. List of all employees that are trained and currently certified in asbestos abatement, handling and disposal.
 2. Method(s) to cut and remove pipe materials containing asbestos.
 3. Methods to protect employees and/or public from exposure.
 4. Methods to store on-site if not going directly to landfill.
 5. Waste manifest that documents location removed, quantities, where/when stored, when disposed at landfill and landfill disposal ticket.
 6. If Asbestos Cement Pipe and/or Pipe with Coatings Containing Asbestos is anticipated or encountered, a disposal manifest log will be provided by TMWA that will need to be completed by the Contractor for each location where pipe constructed of asbestos- containing materials is removed. This log documents removal and on-site storage if not taken directly to landfill and is in addition to the waste manifest that documents final disposal in an approved landfill. This form must be completed/signed by the Contractor's designated asbestos trained/certified personnel.
- E. Final payment of retention shall not be made until all documentation on the disposal of pipe constructed of asbestos-containing materials is provided to the TMWA Representative, no exceptions or pro-rated payment due to lack of documentation shall be made.

4.07 Rock Excavation

- A. The term "rock excavation" is defined as:
1. For trench excavation, rock excavation is excavation of all solid rock in place that cannot be removed by power equipment equivalent, or larger, in weight, engine power, and bucket force to a Caterpillar 345C L Hydraulic Excavator equipped as follows.
 2. Caterpillar 1.8 cubic yard heavy duty rock bucket with 4 teeth.

- i. 22'-8" reach boom with a 12'-10" stick and 16,780 lb. counterweight.
- ii. For mass grading, rock excavation is excavation of all solid rock in place that cannot be removed by power equipment equivalent, or larger, in weight, engine power, vertical shank penetration force, and pry out force to a Caterpillar D8T Track-type Tractor equipped with a single shank, standard depth, ripper tooth.
3. For all excavations, rock excavation is excavation of boulders or detached pieces of rock greater than 54 cubic feet in volume.

The term "rock excavation" does not include or apply to any trenchless installation, including but not limited to, jack and bore installation, auger boring, tunneling, directional drilling, and similar types of construction methods. Due to the obvious presence of rock and boulders in the vicinity of the Truckee River, which Contractor acknowledges, the term "rock excavation" also does not include or apply to, nor will any associated unit adjusting price apply to, excavation and trenching performed within two hundred feet either side of the approximate centerline of the Truckee River channel.

- B. If rock is encountered such that Contractor believes rock excavation, as defined above, is required, the Contractor shall notify the Project Representative in writing. If the Project Representative agrees that rock excavation is required, rock excavation will be paid for at the price per cubic yard for rock excavation (trench excavation) and/or rock excavation (mass grading) submitted in the Bid Proposal, as applicable.
 1. Payment for any category of rock excavation will be in addition to the lump sum or unit prices for the Work submitted in the Bid Proposal.
 2. Payment for rock excavation of boulders or detached pieces of rock greater than 54 cubic feet in volume will be paid for at the price per cubic yard for rock excavation (trench excavation) submitted in the Bid Proposal.
 3. The Contractor will not be eligible for any additional payment for rock excavation associated with the Work wherever solid rock can be seen from the surface, or where indicated from geotechnical test pit investigations.

If there are no bid items covering rock excavation of the type encountered, payment for approved rock excavation will be made in accordance with Section 7.03 "Extra Work – Request for Approval" and Section 7.06 "Extra Work – Payment for Time and Material Work on Construction Change Directives" of the General Conditions.

- C. Blasting is not permitted.

ARTICLE 5: BONDS AND INSURANCE – NOT USED

5.01 Performance and Payment Bonds – Not Used

5.02 Contractor's Insurance

- A. Contractor shall, at Contractor's sole expense, procure, maintain, and keep in force the following insurance and pay all taxes and fees incident hereunto. The required

insurance shall be in effect prior to the commencement of Work by Contractor. TMWA shall have no liability except as specified in this Agreement. Contractor shall furnish evidence of such insurance to TMWA no later than ten (10) calendar days after receipt of the Notice of Award.

Insurance Type	Minimum Limits	Insurance Certificate	Additional Insured	Waiver of Subrogation
Workers' Compensation	Statutory	✓	N/A	✓
Employer's Liability	\$1,000,000	✓	N/A	✓
General Liability/ Umbrella (Excess) Liability	\$2,000,000 each occurrence/\$4,000,000 aggregate limits	✓	✓	✓
Electronic Data Liability	\$2,000,000 each occurrence/\$4,000,000 aggregate limits	✓	✓	✓
Automobile Liability/Umbrella (Excess) Liability	\$2,000,000	✓	N/A	✓
Pollution Liability Insurance	\$1,000,000/\$2,000,000	✓	✓	N/A
Non-Owned Disposal Site Pollution Liability Insurance	\$1,000,000/\$2,000,000	✓	N/A	N/A
Professional Liability, Errors & Omissions	\$1,000,000	✓	N/A	N/A

- B. Contractor shall include all Subcontractors under its coverage or shall contractually require all of its Subcontractors to procure, maintain and provide evidence of insurance coverage with limits no less than those required herein. Any limits maintained by subcontractors under their own policies shall be at least \$1,000,000 per occurrence and at least \$2,000,000 for any applicable coverage aggregates. If subcontractors provide their own insurance with limits less than required of the Contractor, Contractor shall include subcontractors in their coverage up to the full limits required of the Contractor. When Subcontractors provide separate coverage, they shall include TMWA as an additional insured under their commercial general liability without requiring a written contract or agreement between TMWA as the additional insured and Subcontractor. When requested by TMWA, Contractor shall furnish copies of certificates of insurance evidencing coverage for each subcontractor. Contractor shall require its Subcontractors provide appropriate certificates and endorsements from their own insurance carriers naming Contractor and TMWA as additional insureds.
- C. Any insurance or self-insurance available to TMWA shall be excess of and non-contributing with any insurance required from Contractor. Contractor's insurance policies shall apply on a primary basis. Until such time as the insurance is no longer

required by TMWA, Contractor shall provide TMWA with renewal or replacement evidence of insurance no less than thirty (30) days before the expiration or replacement of the required insurance. If at any time during the period when insurance is required by the Agreement, an insurer or surety shall fail to comply with the requirements of this Agreement, as soon as Contractor has knowledge of any such failure, Contractor shall immediately notify TMWA and immediately replace such insurance or bond with an insurer meeting the requirements.

- D. Subject to any additional requirements in this Agreement, TMWA, its officers, employees and any other Indemnitees included under this Agreement shall be included as additional insureds under all liability policies, except Workers' Compensation, for all liability arising from the Agreement. Additional insured status for all required parties shall apply until the expiration of time within which a claimant can bring suit per applicable state law.
- E. Each liability insurance policy, unless otherwise specified below, shall be endorsed to provide that the insurance company waives all right of recovery by way of subrogation against TMWA, its officers, agents, employees, agents, in connection with damage covered by any policy.
- F. Insurance maintained by Contractor shall apply for those named as additional insured on a first dollar basis without application of a deductible or self-insured retention. Should Contractor be self-insured for any required coverage, Contractor shall notify TMWA in writing prior to the signing of a Contract. TMWA reserves the right to accept or reject a self-insured Contractor and to approve the amount of any self-insured retention(s). Contractor agrees that TMWA is entitled to obtain additional documentation, financial or otherwise, for review prior to entering into a contract or Agreement with the self-funded Contractor. The Contractor shall be responsible for satisfying any deductible or self-insured retention. Any deductible or self-insured retention shall not exceed \$50,000 per occurrence unless otherwise submitted and approved by TMWA in writing. There shall be no provision providing that the self-insured retention or deductible can only be satisfied by the named insured.
- G. Each insurance policy shall be:
 - 1. Issued by licensed and admitted insurance companies authorized to do business in the State of Nevada or that meet any applicable state and federal laws and regulations for non-admitted insurance placements and acceptable to TMWA, and
 - 2. Currently rated by A.M. Best as "A, X", or better.
- H. Policies Required:
 - 4. Contractors Pollution Liability Insurance

Contractor shall maintain in force for the full period of this Agreement insurance covering losses caused by pollution incidents that arise from the operations of Contractor described under the scope of services of this contract.

Coverage shall apply to bodily injury; property damage, including loss of use of damaged property or of property that has not been physically injured; cleanup costs; and defense, including costs and expenses incurred in the investigation, defense, or settlement of claims. The policy of insurance affording these required coverages shall be written with limits of liability not less than the amounts outlined in the table above per claim, with an annual aggregate of that outlined in the table above.

TMWA, its officials, officers, employees, and volunteers shall be included as insureds under Contractor's pollution liability insurance.

If coverage as required herein is written on a claims-made basis, Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of this contract; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of five (5) years beginning from the time that Work under the Agreement is completed.

Non-Owned Disposal Site Coverage. If the scope of services as defined in this Agreement includes the disposal of any hazardous or nonhazardous materials from the job site, Contractor must furnish to TMWA evidence of pollution liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting waste under this contract. Coverage certified to TMWA under this section must be maintained with limits of liability not less than the amounts outlined in the table above per loss, and an annual aggregate of that outlined in the table above.

5.03 Property Insurance – Not Used

ARTICLE 6: CONTRACTOR'S RESPONSIBILITIES – NOT USED

ARTICLE 7: PAYMENT AND RETENTION – NOT USED

ARTICLE 8: TIME EXTENSIONS AND DELAYS – NOT USED

ARTICLE 9: SUSPENSION AND TERMINATION OF WORK – NOT USED

ARTICLE 10: OTHER PROVISIONS – NOT USED

ARTICLE 11: MISC. AND LEGAL PROVISIONS – NOT USED

**ASBESTOS CEMENT PIPE (AKA TRANSITE) AND/OR PIPE WITH
COATINGS CONTAIN ASBESTOS LOG**

DATE OF REMOVAL: _____

LOCATION OF REMOVAL: _____

PIPE DIAMETER AND LENGTH: _____

BROKEN PIECES APPROXIMATE VOLUME (CUBIC FEET): _____

MISC INFORMATION: _____

PIPE BAGGED/WAPPED: _____

PIPE STORED PRIOR TO LANDFILL (SPECIFY LOCATION BELOW): YES _____ NO _____ DATE

ON-SITE DISPOSAL LOCATION PRIOR TO LANDFILL: _____

PRINT ASBESTOS TRAINED/CERTIFIED EMPLOYEE (NAME/NUMBER):

_____ **DATE** _____

EMPLOYEE SIGNATURE (ASBESTOS TRAINED/CERTIFIED)

END OF GENERAL CONDITIONS

GEOTECHNICAL INVESTIGATION
NORTH McCARRAN BOULEVARD
& EAST PRATER WAY
SEWER CAPACITY IMPROVEMENT PROJECT
SPARKS, NEVADA



**CONSTRUCTION
MATERIALS
ENGINEERS, INC.**



PREPARED FOR:

JUB ENGINEERS

**NOVEMBER 2021
FILE: 2784**



300 Sierra Manor Drive, Suite 1
Reno, NV 89511

November 5, 2021
File: 2784

Lonnie Johnson, PE
J-U-B Engineers, Inc.
9160 Double Diamond Parkway
Reno, NV 89521

**RE: Geotechnical Investigation
North McCarran Boulevard & East Prater Way Sewer Capacity Improvement Project
Sparks, Nevada**

Dear Mr. Johnson:

Construction Materials Engineers Inc. (CME) is pleased to submit our geotechnical investigation report for the proposed North McCarran Boulevard & East Prater Way Sewer Capacity Improvement Project in Sparks, Nevada.

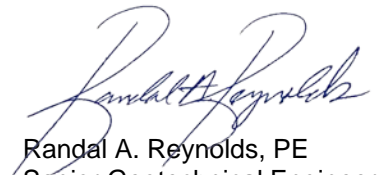
The following report includes the results of our field investigation, laboratory testing and presents our recommendations for the design and construction of the project. We wish to thank you for the opportunity to provide our services and look forward to working on future endeavors together.

Please feel free to call us should you have any questions or require additional information.

Sincerely,

CONSTRUCTION MATERIALS ENGINEERS, INC.

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TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	PROJECT DESCRIPTION AND SITE CONDITIONS.....	2
3.0	SUBSURFACE EXPLORATION.....	3
3.1	Exploratory Borings.....	3
4.0	LABORATORY TESTING.....	3
5.0	EXISTING CONDITIONS.....	4
5.1	Existing Structural Section Estimate.....	4
5.2	General Subsurface Profile.....	4
5.3	Groundwater and Soil Moisture.....	6
6.0	DISCUSSION.....	7
6.1	General Information.....	7
6.2	Construction Considerations.....	8
7.0	GENERAL RECOMMENDATIONS FOR CONSTRUCTION OF OPEN CUT EXCAVATIONS.....	9
7.1	Trenching and Confined Excavations.....	9
7.1.1	OSHA Trench Walls.....	9
7.1.2	Shoring.....	10
7.2	Trench Bedding and Backfill Definitions.....	12
7.3	Bottom of Trench Preparation.....	13
7.4	Pipe Zone & Pipe Bedding.....	13
7.5	Trench Backfill.....	13
7.6	Pipe Zone Bedding and Backfill Placement Considerations.....	13
7.7	Manhole Foundations.....	14
7.7.1	Soluble Sulfate Test Results.....	14
8.0	STRUCTURAL SECTION RECOMMENDATIONS.....	15
8.1	Structural Section Design.....	15
8.1.1	ESAL Calculations.....	15
8.1.2	Resilient Modulus Calculations.....	15
8.1.3	Design Structural Number Calculation.....	16
8.1.4	Design Structural Section.....	17
8.2	Structural Section Construction & Maintenance.....	18
8.2.1	Structural Section Subgrade Preparation.....	18
8.2.2	Aggregate Base Material.....	18
8.2.3	Asphalt Concrete Pavement.....	18
8.2.4	Pavement Maintenance.....	18
9.0	TESTING AND DOCUMENTATION.....	19
10.0	LIMITATIONS.....	20

TABLES

Table 1: General Project Topography and Roadway Description.....	2
Table 2: General Project Pipe Types and Elevation/Depths.....	2
Table 3: General Subsurface Profile.....	5
Table 4: General Definitions for Report Recommendations	7
Table 5: Maximum Allowable Temporary Slopes.....	9
Table 6: Soil Sulfate Content Results	14
Table 7: ESAL Calculation Input Parameters	15
Table 8: Design Structural Number Parameters	16
Table 9: Recommended Structural Section Thickness.....	17

FIGURES

Figure 1: Typical Soil Load Pressure Diagrams for Shoring Design	10
Figure 2: Trench Excavation/Backfill Detail	12

APPENDICES

APPENDIX A

Plate A-1a – Exploration Location Map
Plate A-1b – Geologic Cross Section
Plate A-2 – Boring Logs
Plate A-3 – Soil Classification Chart

APPENDIX B

Plate B-1 – Grain Size Analysis
Plate B-2 – Plasticity Index
Plate B-3 – R-values
Plate B-4 – Corrosion Test Results

APPENDIX C

Historic Exploration Logs

GEOTECHNICAL INVESTIGATION

North McCarran Boulevard & East Prater Way Sewer Capacity Improvement Project Sparks, Nevada

1.0 INTRODUCTION

The North McCarran Boulevard & East Prater Way Sewer Capacity Improvement Project includes replacement of approximately 2,000 lineal feet of reinforced concrete pipe (RCP) or asbestos concrete (i.e. transite) sanitary sewer line. The replacement sewer line alignment is located along the southbound lanes or shoulder of North McCarran Boulevard between East Prater Way and Greenbrae Drive. The proposed sewer line depths range from approximately 10 and 20 feet below ground surface (bgs). Plate A-1a (Exploration Location Map) presents the proposed replacement areas. Proposed improvements will be located in the City of Sparks and within NDOT right-of-way.

The area covered by this report included on Plate A-1a (Exploration Location Map). This geotechnical investigation included subsurface exploration utilizing vertical test borings, laboratory testing, and engineering analysis to identify the physical and mechanical properties of the various on-site materials. Results of our subsurface exploration and testing program included in this report form the basis for all conclusions and recommendations contained herein.

2.0 PROJECT DESCRIPTION AND SITE CONDITIONS

Based on our understanding of the project, the existing sewer line will be replaced to increase volume capacity. While the majority of the replacement sewer line alignment is primarily located along North McCarran Boulevard, toward the south end of the sewer line alignment it crosses the intersection with East Prater Way and connects to the existing sewer line located on East Prater Way near the east side of the intersection. Project extents, topography, roadway description, and existing/proposed sanitary sewer lines are summarized in Table 1 and Table 2.

Table 1: General Project Topography and Roadway Description

Segment	Pipe Plan Location	Approximate Length (ft)	Existing Ground Elevation Range (ft)	Number of Lanes Per Roadway Direction
North McCarran Boulevard from Greenbrae Drive to Gleeson Way	Southbound #2 Lane or Shoulder	1000	4,405 to 4,410	2
North McCarran Boulevard from Gleeson Way to East Prater Way	Southbound #2 Lane or Shoulder	850	4,410 to 4,403	2
East Prater Way from North McCarran to 200 feet east	Westbound #2 Lane or Right Turn Lane	200	4,403 to 4,402	2

Table 2: General Project Pipe Types and Elevation/Depths

Segment	Existing Pipe	Proposed Pipe	Pipe Invert Elevation Range (ft)	Pipe Invert Depth Range (ft)
North McCarran Boulevard from Greenbrae Drive to Gleeson Way	24-inch RCP	30-inch PVC or HDPE	4,392 to 4,391	14 to 19
North McCarran Boulevard from Gleeson Way to East Prater Way	24-inch RCP	30-inch PVC or HDPE	4,391 to 4,390	19 to 13
East Prater Way from North McCarran to 200 feet east	10-inch Transite	18-inch PVC or HDPE	4,390 to 4,389	13 to 11

The sewer line replacement will be completed using open cut construction techniques. In conjunction with the sewer line replacement, the existing structural section will be reconstructed in the lane within and potentially adjacent to the sewer replacement alignment.

3.0 SUBSURFACE EXPLORATION

3.1 EXPLORATORY BORINGS

The project site was explored on April 29th to 30th, 2021. The subsurface exploration included three (3) vertical test borings drilled to depths of 21.5 to 24 feet below the existing ground surface (bgs). The subsurface soil profile was sampled in-place at approximate 2½ foot intervals using a 2-inch diameter split spoon sampler¹ to the maximum depth of exploration. JUB Engineers surveyed exploratory borings; exploratory boring surface elevations were provided to CME and are reflected on the boring logs (Plate A-2).

Bulk samples of the subgrade soils and aggregate base were collected from the auger cuttings and bagged in the field.

Soil samples were visually examined and classified during exploration in general accordance with ASTM D2488 and subsequently updated in general accordance with ASTM D2487 where applicable. Exploration locations (Plate A-1a), boring logs (Plate A-2), and USCS chart (Plate A-3) are included as Appendix A.

4.0 LABORATORY TESTING

Soil testing performed in CME's laboratory was conducted in general accordance with the standards and methodologies described in Volume 4.08 of the ASTM Standards. Significant soil types were selected and analyzed to determine index properties. The following laboratory tests were completed as part of this investigation:

- In situ moisture content (ASTM D2216);
- Grain size distribution (ASTM D6913);
- Plasticity index (ASTM D4318); and
- R-value (ASTM D2844).

In addition, our firm contracted with an outside laboratory to complete the following analytical testing for the corrosion potential of the site soils:

- Soluble Sulfates (ASTM C1580).

Laboratory test results for the subsurface exploration are presented included in Appendix A & B.

¹ The number of blows to drive the sampler the final 12 inches of an 18-inch penetration into undisturbed soil is an indication of the density and consistency of the material (Standard Penetration Test (SPT) - ASTM D1586). Boring logs indicate the type of sampler used for each boring and sample.

5.0 EXISTING CONDITIONS

5.1 EXISTING STRUCTURAL SECTION ESTIMATE

The exploratory borings were drilled in the southbound #2 lane of North McCarran Boulevard. Asphalt thickness were estimated 5 to 7-inches with an average of 6-inches. Due to the dense and coarse-grained nature of the subgrade, aggregate base thickness was difficult to differentiate from the underlying subgrade. In Boring (B-1), the aggregate base was estimated to be approximately 5-inches thick. The existing structural section is estimated to be approximately 6-inches of asphalt concrete on 6-inches of aggregate base.

5.2 GENERAL SUBSURFACE PROFILE

Based on a review of the Preliminary Revised Geologic Maps of the Reno Urban Area, Nevada (Ramelli, A.R., Henry, C.D., Walker, J.P., 2011), the majority of the site is mapped as Younger and older Tahoe age Truckee River deposits (Qrt). The southern extent of the project (near North McCarran Boulevard and East Prater Way) is mapped as younger alluvium underlain by Qrt. In general, the subsurface profile appears to be consistent with the mapped geology.

Table 3 generally summarizes the soil profile encountered in the borings. Four distinctive geologic units were encountered and are summarized in sequence starting from the uppermost soil horizon encountered to the lowermost soil horizon encountered. Additionally, Table 3 provides an opinion of the caving potential and reuse as trench backfill for each of these soil horizons.

Table 3: General Subsurface Profile

Geologic Unit	Description/Discussion	Caving Potential ¹	Anticipated Reuse as Trench Backfill
1	<u>Silty sand with gravel (SM), dense (likely fill soils)</u> This soil layer is likely related to the existing North McCarran Boulevard construction due to its fairly consistent properties and dense relative density.	Low	Likely
2	<u>Silty sand (SM) to clayey sand (SC), loose to medium dense</u> The northern portions of the project encountered a loose silty sand (SM) within this unit. Two of the borings encountered caving in or near this geologic unit. Towards East Prater way, this geologic unit consisted of a medium dense clayey sand (SC) to hard silt (ML).	High – Northern Portion of Site Low – Southern Extent	Likely – Northern Portion of Site Unlikely – Southern Extent
3	<u>Poorly graded sand with silt (SP-SM), medium dense to dense</u> The top of this geologic unit is approximately elevation 4,394± feet but varies in thickness along the alignment. This unit is relatively homogenous with approximately 10% fines and in a medium dense to dense state. Depending on the elevation, this geologic unit may be above or below groundwater.	Moderate – above groundwater High – below groundwater	Likely
4	<u>Sand and gravel, very dense</u> Underlying the above geologic units are very dense sands and gravels above and below groundwater.	Low – above groundwater Moderate – below groundwater	Likely
NOTE: 1. It is advised that the trench sidewall caving potential is based on soil types encountered during our drilling operations. It does not represent excavations adjacent to existing utility lines and potential caving issues due to the bedding and backfill soils used for these utility lines. The contractor should determine the impact of existing utility lines to the stability of the trench sidewall soils.			

Plate A-1b (Geologic Cross Section) and Plates A-2 (boring logs) present a more detailed description of each layer, elevations, and soil units in relation to the proposed sewer line.

5.3 GROUNDWATER AND SOIL MOISTURE

Soil moisture content varied with depth and material type. Unstabilized groundwater levels were recorded in every boring at depths ranging from 15 to 19 feet below the ground surface, which relate to groundwater elevations ranging from approximately 4,388 to 4,390 feet. Based on historic groundwater data in CME's internal library dating from the 1970s to 2020, groundwater could fluctuate up to an average elevation 4,393 feet.

Due to the depth of the proposed excavation, construction planning should include the assumption that groundwater fluctuations may occur due to precipitation, temperature, runoff, adjacent irrigation, or where conduits such as utility trenches are present.

Depending on the season of construction, seepage may be encountered, especially during spring runoff. The contractor should anticipate this condition and be prepared for dewatering during construction.

6.0 DISCUSSION

6.1 GENERAL INFORMATION

The following definitions are applicable for the general recommendations for design and construction of the project:

Table 4: General Definitions for Report Recommendations

Fine Grained Soil	<ul style="list-style-type: none"> Soil with more than 40 percent by weight passing the number 200 sieve and a plasticity index less than 15.
Clay Soil	<ul style="list-style-type: none"> For the purposes of this report, clay soil is defined as any soil having more than 15 percent by weight passing the number 200 sieve and a plasticity index greater than 15.
Granular Soil	<ul style="list-style-type: none"> Soil not meeting the requirement for a fine-grained or clay soil with: <ul style="list-style-type: none"> A particle size of 4-inches or less, A percent passing the No. 200 Sieve of less than 35 percent; A plasticity index less than 15. Existing onsite material meeting the requirements of a granular soil may be reused as structural fill provided it is free of organics or deleterious materials.
Structural Fill	<ul style="list-style-type: none"> Soil generated from onsite grading may be reused as structural fill provided it meets the requirements of a granular soil; Structural fill is the supporting soil placed in densified lifts below foundations, concrete slabs-on-grade, pavements, or any structural element that derives support from the underlying sub-soils material;
Structural Areas	<ul style="list-style-type: none"> Includes all areas that will be used for the support of concrete slabs, flatwork, foundations, and pavements.
Subgrade	<ul style="list-style-type: none"> The elevation directly below the aggregate base layer for both concrete slabs-on-grade and pavements; Bottom of excavation for foundations bottomed on native soil materials, and structural fill; and The native soil surface elevation below structural fill.
Relative Compaction	<ul style="list-style-type: none"> The dry density of soil in the field expressed as a percentage of the density of the soil after densification during placement. Relative compaction shall be in accordance with ASTM D1557.
Standard Specifications	<ul style="list-style-type: none"> 2014 NDOT Standard Specifications for Road and Bridge Construction (Silver Book). 2012 Revision 8 Standard Specifications for Public Works Construction (SSPWC).

6.2 CONSTRUCTION CONSIDERATIONS

Based on the subsurface conditions encountered and proposed project details including anticipated pipe depths, the following should be noted:

1. Groundwater depths are anticipated to be at or near the proposed sewer pipe invert elevation. Refer to project plans for proposed sewer line invert and bottom of manhole foundation elevations. Refer to Section 5.3 for anticipated groundwater elevations.
2. Soil conditions encountered, in our opinion, generally have a moderate to high trench sidewall caving potential. The contractor should plan their construction approach for these potential soil conditions. Refer to Plate A-1b and Section 5.2 for relative caving potential throughout the soil profile.
3. Trench caving was a significant issue on a recent sewer line replacement project in the vicinity of the East Prater Way connection point.
4. Trench caving potential increases with longer time exposures of unstabilized trench sidewalls. Granular soils will initially experience “apparent” cohesion due to soil moisture. However, as the soil dries, this apparent cohesion will subside and the soil will begin to unstabilize and cave. Although being a contributing factor to soil caving, it is not the only factor as soil plasticity, density, particle angularity, and grain size distribution also have significant roles in determining caving potential. However, in general, CME recommends trenches are not left open for extended periods of time to lessen the potential for caving.

7.0 GENERAL RECOMMENDATIONS FOR CONSTRUCTION OF OPEN CUT EXCAVATIONS

7.1 TRENCHING AND CONFINED EXCAVATIONS

It is anticipated that trenching and confined excavations may be performed using conventional excavation equipment such as a standard backhoe, track mounted excavator or similar equipment. All excavations regardless of depth should be evaluated for stability including scaling trench wall (if exposed) to remove loose material prior to occupation by construction personnel.

During a recent sewer line replacement project (along East Prater Way from Howard Drive to Sparks Boulevard) adjoining this project, trench wall caving was significant in part due to extended time periods of unstabilized trench sidewall soils. The contractor should be aware of this caving potential and the advantage of expediting the construction process.

7.1.1 OSHA TRENCH WALLS

Excavations should comply with current OSHA safety requirements (Federal Register 29 CFR, Part 1926)². Materials are classified as Stable Rock, Type A, B or C, which requires different temporary excavation, cut slope gradients (Table 5: Maximum Allowable Temporary Slopes).

Table 5: Maximum Allowable Temporary Slopes		
Soil or Rock Type	Maximum Allowable Slopes ¹ For Excavations Less Than 20 Feet Deep ²	
Stable Rock	Vertical	90°
Type A	3H:4V	53°
Type B	1H:1V	45°
Type C	3H:2V	34°
NOTES: 1. Angles expressed in degrees from the horizontal and have been rounded off. 2. Sloping or benching for excavations greater than 20 feet deep shall be designed by a registered professional engineer. 3. For detailed description of the soil types outlined above visit the US Department of Labor Safety and Health Topics website at: https://www.osha.gov/SLTC/trenchingexcavation/construction.html		

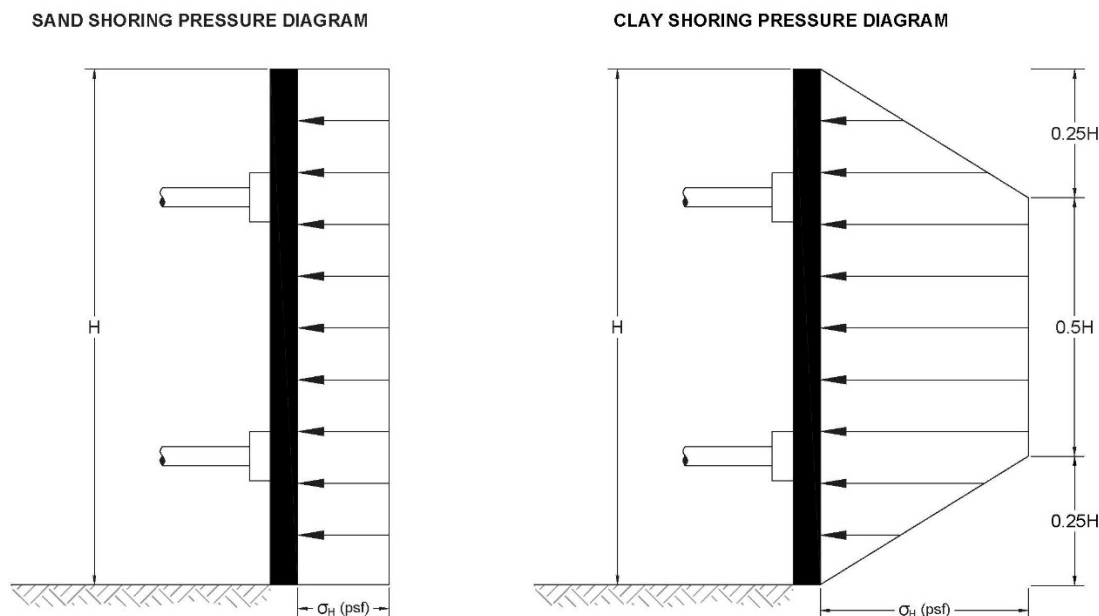
The predominate soil types are anticipated to correspond with OSHA safety requirements for Type C soils (Federal Register 29 CFR, Part 1926), which should be adjusted as needed for compliance during construction.

² Deeper excavations where layered geotechnical strata is encountered can be evaluated by the project geotechnical engineer to determine the maximum allowable slope configuration for the layered system.

7.1.2 SHORING

Trench wall stability will remain the responsibility of the contractor present at the site. Shoring or sloping of trench walls will be required to protect construction personnel and provide temporary stability during open cut excavations.

In areas where temporary confined excavations may be unstable, trench boxes have typically been used to provide safe ingress and egress for construction personnel. Due to the depth of installation and location of potential subsurface and surface conflicts, shoring may be required to limit the width of the excavation and permit access for construction. Shoring should be designed to withstand soil loads, surcharge loads adjacent to the trench, live loads from traffic and construction equipment, and for potential hydrostatic pressures due to groundwater and/or seepage forces. Soil pressure diagrams for shoring based on material type are included as Figure 1 (Typical Soil Load Pressure Diagrams for Shoring Design).



The apparent earth pressure distribution can be delineated by the following equations (NAVFAC DM 7.-2):

GRANULAR SOIL	STIFF CLAY ($\frac{\gamma H}{c} < 4$)
$\sigma_H (psf) = 0.65 * k_a * \gamma * H$ <p>Where: H is the height of the excavation (ft); γ is the unit weight of soil (pcf); k_a is the active earth pressure.</p>	$\sigma_H (psf) = 0.2 * \gamma * H$ <p>Where: H is the height of the excavation (ft); γ is the unit weight of soil (pcf); c is the undrained cohesion of the soil (psf).</p>
*The equations presented above assume a short construction period (i.e. temporary shoring in place less than 6 months)	

Figure 1: Typical Soil Load Pressure Diagrams for Shoring Design

Active earth pressure for shoring (σ_H) of temporary excavations is a function of the groundwater conditions and soil type encountered. The following provides general recommendations for active earth pressure for temporary excavations:

- For granular soil above groundwater, we recommend an active earth pressure (σ_H) of 25H (psf);
- Where below groundwater, even with dewatering, a hydrostatic pressure is anticipated. For granular soil below groundwater, we recommend an active earth pressure (σ_H) of 75H (psf).

To limit the potential for surcharge loads on shored trenches, it is recommended that equipment, material staging areas, or excavated spoils are offset from excavations a minimum lateral distance (from the top of the trench elevation) equal to the depth of the trench (1H:1V). Where proposed surcharge loads will be located within the 1H:1V lateral limits noted above, the increase in trench wall pressure will need to be incorporated into the lateral pressure considerations for shoring design.

If subsurface water conditions differ from those encountered during our subsurface exploration, the geotechnical engineer should be notified immediately to assist with alternative dewatering recommendations.

7.2 TRENCH BEDDING AND BACKFILL DEFINITIONS

For the purposes of this report, the terminology and trench construction in Figure 2 (Trench Excavation/Backfill Detail) shall be referenced.

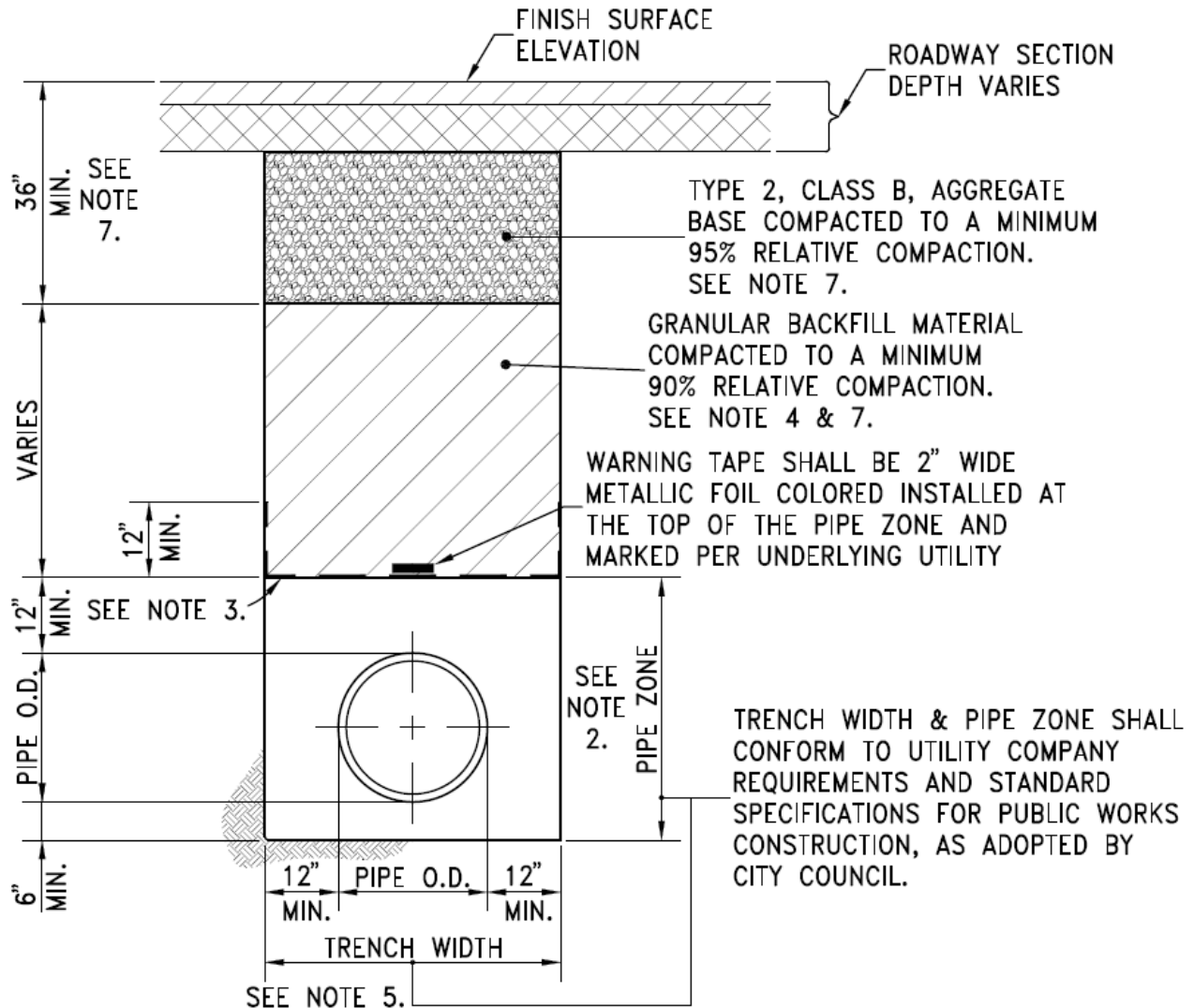


Figure 2: Trench Excavation/Backfill Detail
(Source: City of Sparks Drawing No. S-117 dated January 2020)

Any material used as pipe bedding or trench backfill should meet the minimum requirements of the SSPWC.

7.3 BOTTOM OF TRENCH PREPARATION

Bottom of trench preparation will be dependent on the soil and/or groundwater conditions encountered during construction. In general, the majority of bottom of trench elevation and manhole foundations are anticipated to be bottomed in saturated soil at or near groundwater elevation. However, it should be noted that the northern portion of the alignment may be sufficiently above the groundwater elevation such that saturated soil conditions will not impact the proposed construction in that area. The extents of the unsaturated zone will need to be determined during construction.

Where above groundwater or in unsaturated soil conditions, trench preparation shall include scarifying to a depth of at least 8-inches, moisture conditioned to within 2 percent of optimum, and recompacting to at least 90 percent relative compaction per ASTM D1557.

Where below groundwater or in saturated soil conditions, the loose material at the bottom of the trench shall be removed and replaced with a non-woven geotextile and drain rock as described in Section 7.4.

After establishing a firm and unyielding platform, loose or sloughing trench wall soil shall be removed.

7.4 PIPE ZONE & PIPE BEDDING

Where above groundwater or in unsaturated soil conditions, pipe bedding and pipe zone material shall conform to the requirements of a Class A or Class C backfill (SSPWC Section 200.03.02 and 200.03.04) compacted to at least 90% relative compaction per ASTM D1557. Particular compactive effort should be paid to the pipe haunches (pipe invert to springline).

Where below groundwater or in saturated soil conditions, pipe bedding and pipe zone material shall conform to the requirements of a Class C backfill (i.e. drain rock) (SSPWC Section 200.03.04) completely encapsulated in an 8-ounce non-woven geotextile (e.g. Mirafi 180N).

7.5 TRENCH BACKFILL

The upper 3-feet of the trench backfill shall be backfilled with aggregate base (refer to Section 8.2.2) compacted to a minimum of 95% relative compaction.

The remaining trench backfill may consist of native granular soils screened to remove particles greater than 4 inches nominal diameter or if imported materials are required, they should meet the specifications of a Class E backfill (Section 200.03.06, SSPWC). Trench backfill material shall be placed in maximum 8-inch loose lifts and compacted to at least 90% relative compaction.

Majority of the onsite soil excavated is anticipated to be reusable as trench backfill.

7.6 PIPE ZONE BEDDING AND BACKFILL PLACEMENT CONSIDERATIONS

Bedding material surrounding the pipeline installation up to the springline is considered the most critical area in providing support for all subsurface pipeline installations. The contractor will be responsible for ensuring pipe haunches are uniformly compacted for the structural support the pipeline installation. Failure to achieve proper compaction may result in poor performance of the installation.

7.7 MANHOLE FOUNDATIONS

Manholes are anticipated to be precast concrete and lowered in place, although some poured in-place manholes bases may be installed in unsaturated conditions. Manhole foundation subgrade preparation should be consistent with bottom of trench preparation outlined in Section 7.3 (Bottom of Trench Preparation).

During construction or their service life, manhole structures may be below groundwater. While below groundwater, a buoyant force will be applied on the manhole foundation equivalent to the weight of the water displaced (i.e. volume of manhole below groundwater times 62.4 pcf). The dead load of the manhole structure may be used to resist this buoyant force. If the dead load is insufficient, skin friction may be applied or base extension may be designed to resist the additional buoyant force. If additional uplift resistance is required, please contact this office for design parameters.

7.7.1 SOLUBLE SULFATE TEST RESULTS

Soil chemistry test results are included in Appendix B and Table 6 (Soil Sulfate Content Results).

Table 6: Soil Sulfate Content Results						
Exploration Designation	Sample ID	Sample Depth (ft)	Sulfate Content (%)	Severity of Potential Exposure	w/cm by mass, maximum	Permitted Cement Type
B-1	1E	12.5-14.0	< 0.02	S0	No w/cm restriction	No type restriction
B-3	3F	15.0-16.5	< 0.02	S0	No w/cm restriction	No type restriction
NOTES: 1. Recommendations based on ACI 201.2R-16.						

A corrosion specialist should be consulted to determine if the site soil conditions warrant further investigation or if proposed structures require corrosion protection.

8.0 STRUCTURAL SECTION RECOMMENDATIONS

8.1 STRUCTURAL SECTION DESIGN

8.1.1 ESAL CALCULATIONS

In order to calculate a 20-year ESAL count, a number of design parameters must be determined, as presented in Table 7.

Table 7: ESAL Calculation Input Parameters		
Design Parameters	Value	Reference
Average Annual Daily Traffic (AADT)	22,000	TRINA Station 0312320, as provided by NDOT.
Truck Percentage (%)	2%	Email correspondence with NDOT Traffic Information Systems personnel (Reese Rigsby) dated May 13, 2021
Average Truck ESAL	0.70	Email correspondence with NDOT Traffic Information Systems personnel (Reese Rigsby) dated May 13, 2021
Annual Growth	0%	Based on yearly AADT provided by TRINA Station 0312320 from 2010 to 2019
Growth Factor	20.0	$20^{1+0.00}$
Directional Distribution Factor (DDF)	0.50	50% of travel in each direction
Lane Distribution Factor (LDF)	0.90	1993 AASHTO Section 2.1.2 for 2-lanes per direction

Using these design parameters, the 20-year ESAL count ($ESAL_{20}$) is calculated in Equation 1:

Equation 1: ESAL Count Equation

$$ESAL_{20} = (AADT)(Truck\ Percentage)(Average\ Truck\ ESAL)(DDF)(LDF)(Growth\ Factor)(365)$$

Therefore,

$$ESAL_{20} = 22,000 * 0.02 * 0.70 * 0.50 * 0.90 * 20^{1+0.00} * 365 = 1,000,000$$

8.1.2 RESILIENT MODULUS CALCULATIONS

Based on email correspondence with Peter Schmalzer, PE, NDOT Assistant Chief Materials Engineer, NDOT calculates resilient modulus based on the following equation:

$$Mr\ (psi) = 144 * 10^{0.0147 * R + 1.23}$$

R-values along the corridor were tested to be 24, 67, and 53; consequently, the average R-value is 48. Consistent with NDOT design, the design R-value is limited to 45. Therefore, the design resilient modulus (Mr) is estimated to be 11,200 psi.

8.1.3 DESIGN STRUCTURAL NUMBER CALCULATION

The design structural number for the roadway segment is determined by the following calculation, as presented in the 1993 AASHTO Guide for Design of Pavement Structures:

$$\log_{10}(ESAL_{20}) = Z_R * S_o + 9.36 * \log_{10}(SN + 1) - 0.20 * \frac{\log_{10}\left(\frac{\Delta PSI}{4.2 - 1.5}\right)}{0.40 + \frac{1094}{(SN + 1)^{5.19}}} + 2.32 * \log_{10}(M_R) - 8.07$$

Where:

SN = Structural Number

R = Reliability

Z_R = Standard Normal Deviate

S_o = combined standard error of the traffic prediction and performance prediction

ΔPSI = difference between the initial design serviceability index, p_o , and the design terminal serviceability index, p_t

Table 8 presents the remaining input parameters and their respective sources.

Table 8: Design Structural Number Parameters		
Design Parameter	Value	Reference
Reliability, R	85%	1996 NDOT Flexible Structural Design and Rehabilitation Manual Table 6.3
Standard Normal Deviate, Z_R	-1.037	Based on R
Combined standard error of the traffic prediction and performance prediction, S_o	0.45	1996 NDOT Flexible Structural Design and Rehabilitation Manual Section 6.3.3
Design initial serviceability index, p_o	4.5	1996 NDOT Flexible Structural Design and Rehabilitation Manual Table 6.4
Design terminal serviceability index, p_t	2.5	1996 NDOT Flexible Structural Design and Rehabilitation Manual Table 6.5

Using these design values and the previously calculated ESAL counts, the design structural number (SN) was calculated at 2.80.

8.1.4 DESIGN STRUCTURAL SECTION

Based on the 1996 NDOT Flexible Structural Design and Rehabilitation Manual Table 6.6, the following layer coefficients were used:

- Plantmix Surface (AC) = 0.35
- Gravel Base (AB) = 0.10

Table 9 presents the recommended design structural section for the roadway segment.

Table 9: Recommended Structural Section Thickness	
Minimum Thickness of Asphalt Concrete (AC) Pavement (in)	Minimum Aggregate Base (AB) (in)
6.0	7.0

8.2 STRUCTURAL SECTION CONSTRUCTION & MAINTENANCE

8.2.1 STRUCTURAL SECTION SUBGRADE PREPARATION

Subgrade soil should be prepared in accordance with Section 203 of the 2014 NDOT Silver Book.

8.2.2 AGGREGATE BASE MATERIAL

Aggregate base material shall meet the specifications of a Type 2, Class B Aggregate Base (Section 704.03.05 of the 2014 NDOT Silver Book). Aggregate base shall be compacted per Section 302 of the 2014 NDOT Silver Book.

8.2.3 ASPHALT CONCRETE PAVEMENT

Aggregate used for asphalt concrete pavement shall comply with Type 2 or Type 2C aggregate, as selected by NDOT, in accordance with Section 705 of the 2014 NDOT Silver Book. Based on our understanding, Peter Schmalzer, NDOT Assistant Chief Materials Engineer, requested dense grade consisting of Type 2C aggregate overlain by $\frac{3}{4}$ -inch of $\frac{3}{8}$ -inch open grade with PG64-28NV or PG64-28NVTR asphalt binder.

Asphalt concrete pavement construction should be performed in accordance with Sections 401 and 402 of the 2014 NDOT Silver Book.

The contractor should submit a pavement mix design to the owner at least 10 working days prior to construction for approval. It is recommended that when pavement is placed adjacent to concrete flatwork, the finish compacted grade of the pavement be at least $\frac{1}{4}$ to $\frac{1}{2}$ of an inch higher than the edge of adjacent concrete surface. This is to allow adequate compaction of the pavement without damaging the concrete.

8.2.4 PAVEMENT MAINTENANCE

Maintenance is mandatory to long-term pavement performance. Maintenance refers to any activity performed on the pavement that is intended to preserve its original service life or load-carrying capacity. Examples of maintenance activities include patching, crack or joint sealing, and seal coats. If these maintenance activities are ignored or deferred, premature failure of the pavement will occur.

The cost associated with proper maintenance is generally much less than the cost for reconstruction due to premature failure of the pavement. Therefore, since pavement quality is an integral consideration in the formulation of our design recommendations, we strongly recommend the owner/project manager implement a pavement management program.

9.0 TESTING AND DOCUMENTATION

The recommendations presented in this report are based on the assumption that the owner/project manager provides sufficient field testing and construction review during all phases of construction. These construction observations and testing services should include but not be limited to:

- Density testing during trench preparation and backfill;
- Density testing of pavement subgrade, base material, and asphalt concrete pavement; and
- Concrete testing and observation during placement for flat work.

CME employs a large staff of certified inspectors and testers to provide these services. Prior to construction, the owner/project manager should schedule a preconstruction conference to include, but not be limited to: owner/project manager, project engineer, general contractor, earthwork and materials subcontractors, and geotechnical engineer. It is the owner's/project manager's responsibility to set-up this meeting and contact all responsible parties. The conference will allow parties to review the project plans, specifications, and recommendations presented in this report, and discuss applicable material quality and mix design requirements. All quality control reports should be submitted to the owner/project manager for review and distributed to the appropriate parties.

Additionally, all plans and specifications should be reviewed by the engineer responsible for this geotechnical report to determine if design aspects of the project are in accordance with the recommendations contained herein. It is the owner's/project manager's responsibility to provide the plans and specifications to the geotechnical engineer.

10.0 LIMITATIONS

Exploration Location and Geologic Variations	<ul style="list-style-type: none"> This report has been prepared in accordance with generally accepted local geotechnical practices. The conclusions and recommendations of this report are provided for the design and construction of the proposed project as described in this report. The analyses and recommendations contained herein are based upon field exploration locations included on Plate A-1. Exploration locations included as part of this report should be considered accurate only to the degree implied by the methods used. This report does not reflect soil, rock, or groundwater variations that may become evident during the construction period, at which time re-evaluation of the recommendations may be necessary.
General Intent and Information Distribution	<ul style="list-style-type: none"> The intent of this report is to provide geotechnical information related to construction and design of the project. The owner/project manager is responsible for distribution of this report to all designers and contractors whose work is affected by geotechnical recommendations provided. In the event of changes in the design, location, or ownership of the project prior to construction, our recommendations should be reviewed by our geotechnical representative. If our engineer is not accorded the privilege of making this recommended review, the CME can assume no responsibility for misinterpretation or misapplication of his recommendations or their validity in the event changes have been made in the original design concept without our prior review.
Warranties	<ul style="list-style-type: none"> CME makes no other warranties, either expressed or implied, as to the professional advice provided under the terms of this agreement and included in this report. Any use, reliance on, or decisions, which a third party makes based upon the information contained in this report, are the sole responsibility of such third parties. CME accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.
Clay Soil Clause	<ul style="list-style-type: none"> Clay soils may be present in discontinuous areas below the proposed improvements. Clay soils may potentially shrink or swell (volume changes) in response to changes in the moisture content of the soil. Moisture changes in these soils can occur as a result of seasonal variations in precipitation, poor site drainage, landscape irrigation, leaking underground pipes, capillary action, or from other sources. Volume changes in clay soils can cause differential movements in structural elements constructed in the sphere of influence or bearing on the clay soil. The project geotechnical engineer shall be notified where questionable soils are encountered.
Standard Owner Maintenance and Monitoring Responsibility	<ul style="list-style-type: none"> All structures are subjected to deterioration from environmental and manmade exposures. As a result, all structures require frequent monitoring and regular maintenance to prevent damage and/or deterioration. Such monitoring and maintenance are the sole responsibility of the Owner. CME, Inc. shall have no responsibility for such issues or resulting damages.
Environmental Hazards Evaluation	<ul style="list-style-type: none"> Any evaluation of the site for the presence of surface or subsurface hazardous substances is beyond the scope of this study. When suspected hazardous substances are encountered during routine geotechnical investigations, they are noted in the exploration logs and reported to the client.

APPENDIX A





CME

CONSTRUCTION
MATERIALS
ENGINEERS INC.

300 Sierra Manor Drive, Suite 1
Reno, NV 89511

JUB ENGINEERS

MCCARRAN & PRATER SEWER CAPACITY IMPROVEMENT

EXPLORATION LOCATION MAP

SPARKS, NEVADA

PROJECT NO.: 2784

DATE: 5/16/2021

LEGEND

APPROXIMATE BORING LOCATION

APPROXIMATE EXISTING BORING LOCATION (BY OTHERS)

65-A-1 PRELIMINARY SOILS REPORT, GREENBRAE TERRACE SUBDIVISION UNIT NO. 18, SPARKS, NEVADA BY SEA DATED 1965

71-A-1 SOILS REPORT, WOODSIDE SUBDIVISION, SPARKS, NEVADA BY SEA DATED 1971

72-A-1 SOILS REPORT, SIERRA MEADOWS NO. 7, SPARKS, NEVADA BY SEA DATED 1972

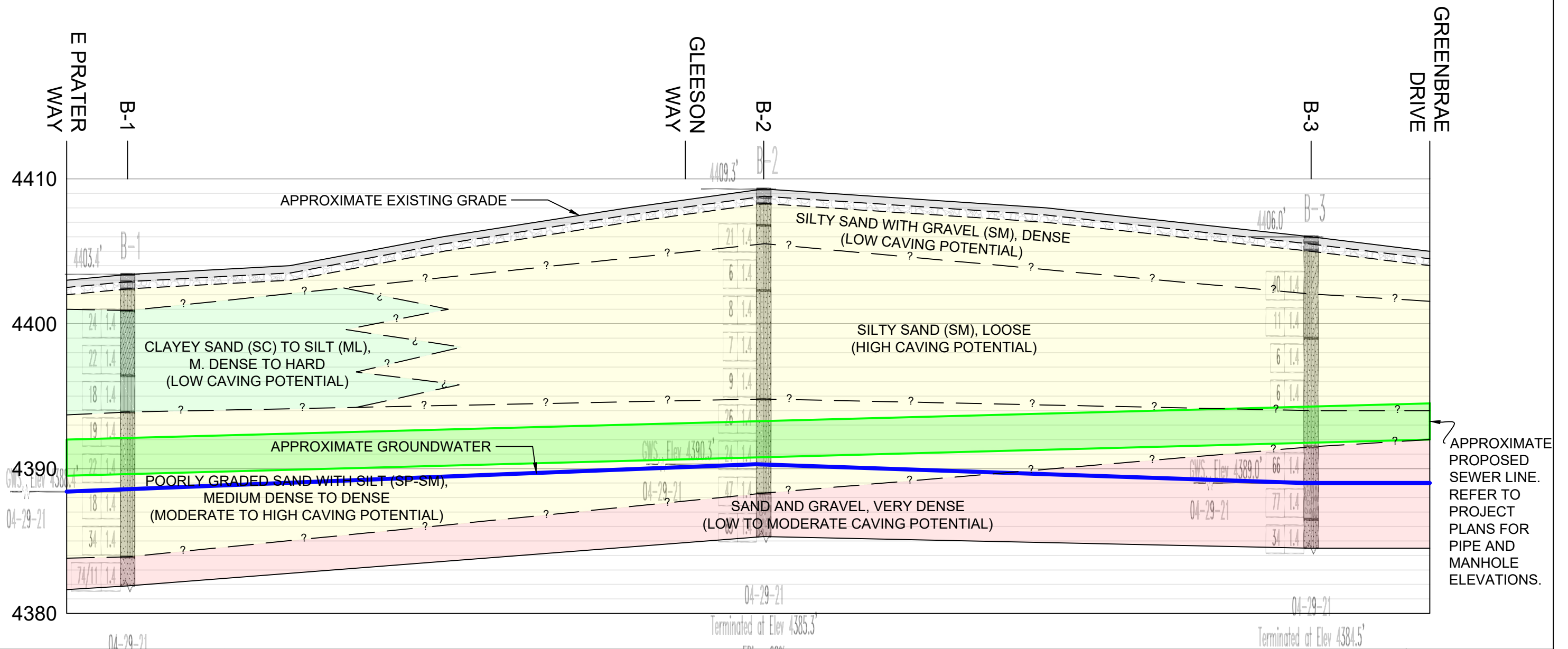
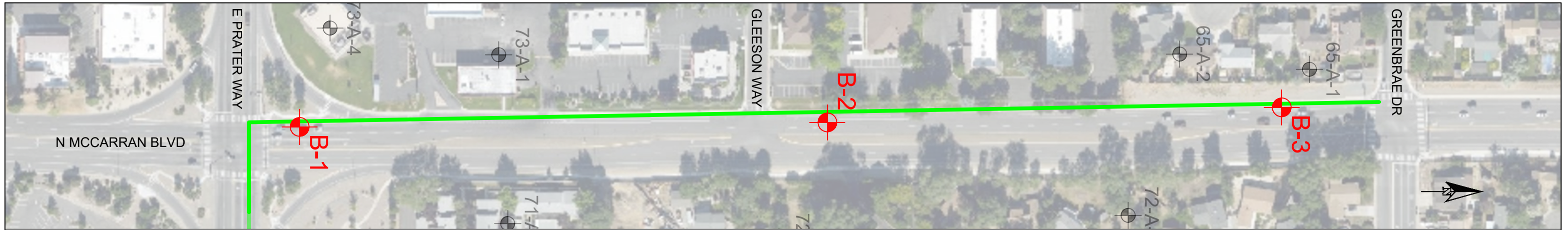
73-A-1 SOILS REPORT, PROPOSED SHOPPING CENTER, SPARKS, NEVADA BY SEA DATED 1973

74-A-1 FOUNDATION INVESTIGATION, PROPOSED HELMS SHOPPING CENTER, SPARKS, NEVADA BY SEA DATED 1974

PLATE

A-1a

Page 118



CME CONSTRUCTION MATERIALS ENGINEERS INC.
 300 Sierra Manor Drive, Suite 1
 Reno, NV 89511

JUB ENGINEERS
 MCCARRAN & PRATER SEWER CAPACITY IMPROVEMENT
 GEOLOGIC CROSS SECTION
 SPARKS, NEVADA
 PROJECT NO.: 2784 DATE: 5/16/2021

LEGEND

PLATE

A-1b

LOG OF BORING B-1

PROJECT NO: 2784	DRILLING CONTRACTOR: TABER	BEGIN DATE: 4/29/2021
PROJECT: MCCARRAN & PRATER SEWER	DRILLING METHOD: HOLLOW-STEM AUGER	COMPLETION DATE: 4/29/2021
LOCATION: MCCARRAN & PRATER, SB #2 LANE 100' N OF PRATER	DRILL RIG: CME 75	SURFACE ELEVATION: 4403.4 (ft)
CLIENT: J-U-B ENGINEERS	SAMPLER TYPE & SIZE: BULK, SPT	BACKFILL METHOD: BENTONITE CHIPS & SOIL CUTTINGS WITH CC
LOGGED BY: CJJ	HAMMER TYPE: AUTO, 140-LB, 30-INCH	WATER DEPTH: 15.0 (ft)
	HAMMER EFFICIENCY: 68%	READING TAKEN: 4/29/2021

DRILL METHOD	CASING DEPTH	FIELD						GRAPHIC LOG	DESCRIPTION	RECOVERY (%)	RQD (%)	LABORATORY						REMARKS
		ELEVATION (ft)	DEPTH (ft)	SAMPLE	SAMPLE NO	BLOWS PER 6 IN.	BLOWS PER FOOT					POCKET PEN. (TSF)	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE (%)	D. DENSITY (PCF)	% PASSING 200 SIEVE	
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**CONSTRUCTION
MATERIALS
ENGINEERS, INC.**

Construction Materials Engineers, Inc.
300 Sierra Manor Drive, Suite 1
Reno, Nevada 89511
(775) 851-8205

PROJECT NUMBER: 2784
PROJECT: MCCARRAN & PRATER SEWER
EXPLORATION: B-1
ENTRY BY: CJJ
CHECKED BY: NRA

SHEET 1 of 1
Page 120

LOG OF BORING B-2

PROJECT NO: 2784	DRILLING CONTRACTOR: TABER	BEGIN DATE: 4/29/2021
PROJECT: MCCARRAN & PRATER SEWER	DRILLING METHOD: HOLLOW-STEM AUGER	COMPLETION DATE: 4/29/2021
LOCATION: MCCARRAN @ GLEESON, SB #2 LANE 170' N OF GLEESON	DRILL RIG: CME 75	SURFACE ELEVATION: 4409.3 (ft)
CLIENT: J-U-B ENGINEERS	SAMPLER TYPE & SIZE: BULK, SPT	BACKFILL METHOD: BENTONITE CHIPS & SOIL CUTTINGS WITH CC
LOGGED BY: CJJ	HAMMER TYPE: AUTO, 140-LB, 30-INCH	WATER DEPTH: 19.0 (ft)
	HAMMER EFFICIENCY: 68%	READING TAKEN: 4/29/2021

DRILL METHOD CASING DEPTH ELEVATION (ft)	DEPTH (ft)	FIELD					GRAPHIC LOG	DESCRIPTION	RECOVERY (%)	RQD (%)	LABORATORY						REMARKS
		SAMPLE	SAMPLE NO	BLOWS PER 6 IN.	BLOWS PER FOOT	POCKET PEN. (TSF)					LIQUID LIMIT	PLASTIC LIMIT	MOISTURE (%)	D. DENSITY (PCF)	% PASSING 200 SIEVE		
								ASPHALT 0.0 - 7.0 INCHES.									AC in two lifts. Difficult to differentiate between base and subgrade. R-Value = 67
								AGGREGATE BASE.									
-4407	1		SG					SILTY SAND with GRAVEL (SM); about 20% coarse to fine GRAVEL, up to 1.0 in. nominal diameter; about 60% coarse to fine SAND; about 20% nonplastic fines.					5.9		18.8		
	2																
-4405	3	X	A	12 13 8	21			Poorly graded SAND with SILT (SP-SM); brown; dry to moist; about 90% medium to fine SAND; about 10% nonplastic fines.	50								
	4																
	5							Coarse to fine SAND.									
-4403	6	X	B	3 3 3	6				33								
	7																
-4401	8	X	C	3 3 5	8			SILTY SAND (SM); brown; moist; about 10% fine GRAVEL, up to 0.75 in. nominal diameter; about 70% medium to fine SAND; about 20% nonplastic fines.	44				9.0		17.0		
	9																
-4399	10																
	11	X	D	3 3 4	7				44								
-4397	12																
	13	X	E	5 4 5	9			About 75% SAND; about 15% fines.	67				7.3		13.8	Caving. Difficult drilling, a lot of cuttings coming up. Sample sticking/stuck in sampler.	
-4395	14																
	15																
-4393	16	X	F	4 12 14	26			Poorly graded SAND with SILT (SP-SM); brown with white specks; dry to moist; about 90% medium to fine SAND; about 10% nonplastic fines. Brown with light brown.	89								
	17																
-4391	18	X	G	8 12 12	24			Grayish brown; moist to wet; coarse to fine SAND.	83				19.3		7.5	Still dry per driller.	
	19																
-4389	20																
	21	X	H	10 19 28	47			Grayish brown with white specks; about 5% GRAVEL.	94							Wet per driller.	
-4387	22																
	23	X	I	11 25 40	65			Poorly graded GRAVEL with SAND (GP); brown; wet; about 55% coarse to fine, subangular to subrounded GRAVEL, up to 1.5 in. nominal diameter; about 40% coarse to fine SAND; about 5% nonplastic fines.								Sampler slightly split open, sample stuck in sampler.	
-4385	24																

Bottom of borehole at 24.0 ft bgs

TERMINATED AT 24.0 FT BGS DUE TO POTENTIAL
CAVING.



**CONSTRUCTION
MATERIALS
ENGINEERS, INC.**






Construction Materials Engineers, Inc.
300 Sierra Manor Drive, Suite 1
Reno, Nevada 89511
(775) 851-8205

PROJECT NUMBER: 2784
PROJECT: MCCARRAN & PRATER SEWER
EXPLORATION: B-2
ENTRY BY: CJJ
CHECKED BY: NRA

SHEET 1 of 1
Page 121

LOG OF BORING B-3

PROJECT NO: 2784	DRILLING CONTRACTOR: TABER	BEGIN DATE: 4/29/2021
PROJECT: MCCARRAN & PRATER SEWER	DRILLING METHOD: HOLLOW-STEM AUGER	COMPLETION DATE: 4/29/2021
LOCATION: MCCARRAN @ GREENBRAE, SB #2 LANE 250' W OF GREENBRAE	DRILL RIG: CME 75	SURFACE ELEVATION: 4406.0 (ft)
CLIENT: J-U-B ENGINEERS	SAMPLER TYPE & SIZE: BULK, SPT	BACKFILL METHOD: BENTONITE CHIPS & SOIL CUTTINGS WITH CC
LOGGED BY: CJJ	HAMMER TYPE: AUTO, 140-LB, 30-INCH	WATER DEPTH: 17.0 (ft)
	HAMMER EFFICIENCY: 68%	READING TAKEN: 4/29/2021

DRILL METHOD	CASING DEPTH	FIELD						GRAPHIC LOG	DESCRIPTION	RECOVERY (%)	RQD (%)	LABORATORY						REMARKS	
		ELEVATION (ft)	DEPTH (ft)	SAMPLE	SAMPLE NO	BLOWS PER 6 IN.	BLOWS PER FOOT					POCKET PEN. (TSF)	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE (%)	D. DENSITY (PCF)	% PASSING 200 SIEVE		
		4404	1	BASE					ASPHALT 0.0 - 5.0 INCHES.										
									AGGREGATE BASE 5.0 - 11.0 INCHES.										
			2	SG						SILTY, CLAYEY SAND with GRAVEL (SC-SM); brown; moist; about 20% fine, subrounded GRAVEL, up to 0.75 in. nominal diameter; about 60% coarse to fine SAND; about 20% low plasticity fines.			21	17	7.7		22.5	R-Value = 53	
			3	A		18	40				78								
			4			24													
			5			16													
			6	B		5	11				6								Rock in shoe. Low recovery, may be slough.
			7			6													
			8			5													
			9	C		2	6				67				10.3		14.6		Soft per driller.
			10			3													
			11			3	6												
			12	D		2					28								
			13			3													
			14			3	6												
			15	E															Gravel chatter. Caving, put water in hole. No sample at E. Drilled passed sample.
			16																
			17	F		7	66				89				13.3		7.0		Wet per driller.
			18			25													
			19			41													Gravel chatter.
			20	G		10	77				44								
	21			42															
	22			35													Gravel chatter, rig shaking vigorously.		
	23																		
	24	H		11	34				33										
				16															
				18															
		</																	



**CONSTRUCTION
MATERIALS
ENGINEERS, INC.**

Construction Materials Engineers, Inc.
300 Sierra Manor Drive, Suite 1
Reno, Nevada 89511
(775) 851-8205

PROJECT NUMBER: 2784
PROJECT: MCCARRAN & PRATER SEWER
EXPLORATION: B-3
ENTRY BY: CJJ
CHECKED BY: NRA

SHEET 1 of 1
Page 122

SOIL CLASSIFICATION CHART					
MAJOR DIVISIONS			SYMBOLS		TYPICAL CLASSIFICATION NAMES
			GRAPH	LETTER	
Course grained soils	Gravel and gravelly soils	Clean gravels		GW	Well-graded gravels, gravel-sand mixtures, few or no fines
				GP	Poorly-graded gravels, gravel-sand mixtures, few or no fines
		Gravels with fines		GM	Silty gravels, gravel-sand-silt mixtures
				GC	Clayey gravels, gravel-sand-clay mixtures
More than 50% of the material is larger than No. 200 sieve size	Sand and sandy soils	Clean sands		SW	Well-graded sands, gravelly sands, few or no fines
				SP	Poorly-graded sands, gravelly sands, few or no fines
		Sands with fines		SM	Silty sands, sand-silt mixtures
				SC	Clayey sands, sand-clay mixtures
				ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands with slight plasticity
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
Fine grained soils	Silty and clays	Liquid Limit less than 50		OL	Organic silts and organic silt-clays of low plasticity
				MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		Liquid Limit greater than 50		CH	Inorganic clays of medium to high plasticity
				OH	Organic clays of medium to high plasticity
				PT	Peat or other highly organic soils

NOTES:

1. Dual classifications may occur (e.g. SP-SM, CL-ML, GP-GC)

PARTICLE ANGULARITY	
Angular	Particles have sharp edges and relatively plane sides with unpolished surfaces
Subangular	Particles are similar to angular, but have rounded edges
Subrounded	Particles have nearly plane sides, but have well-rounded corners and edges
Rounded	Particles have smoothly curved sides and no edges

PARTICLE SHAPE	
Flat	Particles with width/thickness >3
Elongated	Particles with length/width >3
Flat and Elongated	Particles meet criteria for both flat and elongated

MOISTURE	
Dry	No discernable moisture
Moist	Moisture present, but no free water
Wet	Visible free water

CEMENTATION	
Weak	Crumbles or breaks with handling or light finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

PARTICLE SIZE, Ps	
Boulders	Ps > 12"
Cobbles	3" < Ps ≤ 12"
Gravel	coarse 3/4" < Ps ≤ 3"
	fine 1/4" < Ps ≤ 3/4"
Sand	coarse 1/16" < Ps ≤ 1/8"
	medium 1/64" < Ps ≤ 1/16"
	fine 1/300" < Ps ≤ 1/64"
Fines	Ps ≤ 1/300"

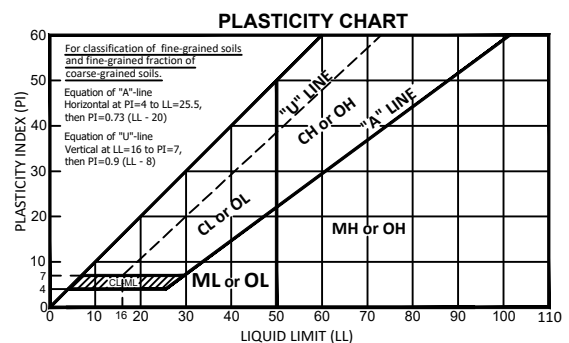
PERCENT OF SOIL, Pp	
Trace	Pp < 5%
Few	5 ≤ Pp ≤ 15%
Little	15 ≤ Pp ≤ 30%
Some	30 ≤ Pp ≤ 50%
Mostly	50 ≤ Pp ≤ 100%

SOIL SAMPLE TYPES

	Bulk Sample
	Standard Penetration Test (2.0" OD, 1.42" ID)
	California Modified Sampler (3.0" OD, 2.42" ID)
	Thin walled Shelby Tube (3.0" OD)
	Rock Core

GROUNDWATER SYMBOLS

	Water level during drilling
	Water level after drilling



APPARENT DENSITY OF COHESIONLESS SOIL	
	SPT (1.4" ID) N_{60}
Very Loose	< 5
Loose	5 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	> 50

Based on 60% energy ratio (ER). $N_{60} = N_{measured} * (ER/60)$

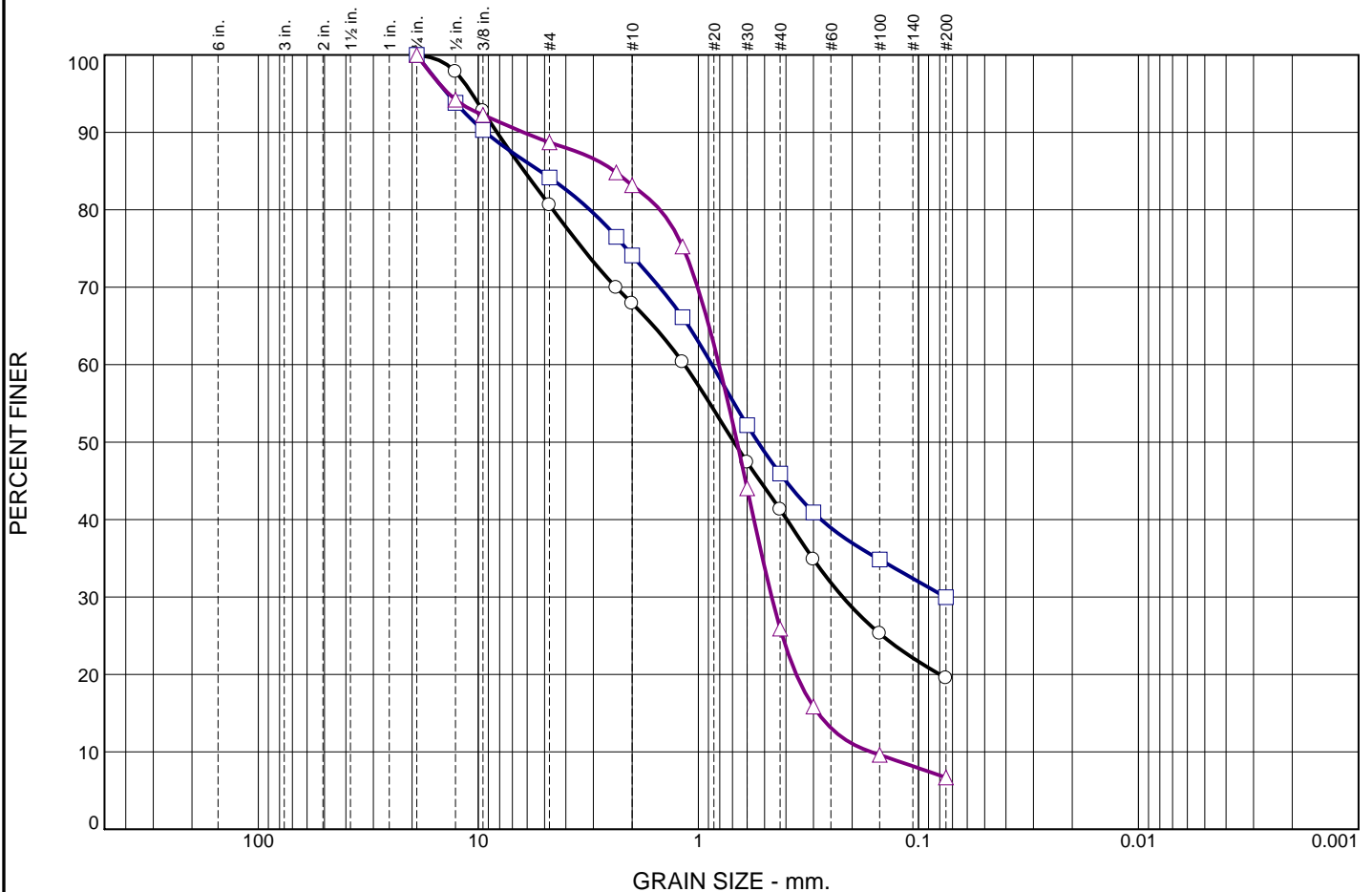
California Modified Sampler can be corrected to SPT by multiplying by 0.62

CONSISTENCY OF COHESIVE SOIL			
	SPT (1.4" ID) N_{60}	Unconfined Compressive Strength (psf)	Pocket Penetrometer (tsf)
Very Soft	0 - 1	< 500	< 0.25
Soft	2 - 4	500 - 1,000	0.25 - 0.5
Medium Stiff	5 - 8	1,000 - 2,000	0.5 - 1.0
Stiff	9 - 15	2,000 - 4,000	1.0 - 2.0
Very Stiff	16 - 30	4,000 - 8,000	2.0 - 4.0
Hard	31 - 60	8,000 - 16,000	> 4.0
Very Hard	> 60	> 16,000	

APPENDIX B



Particle Size Distribution Report



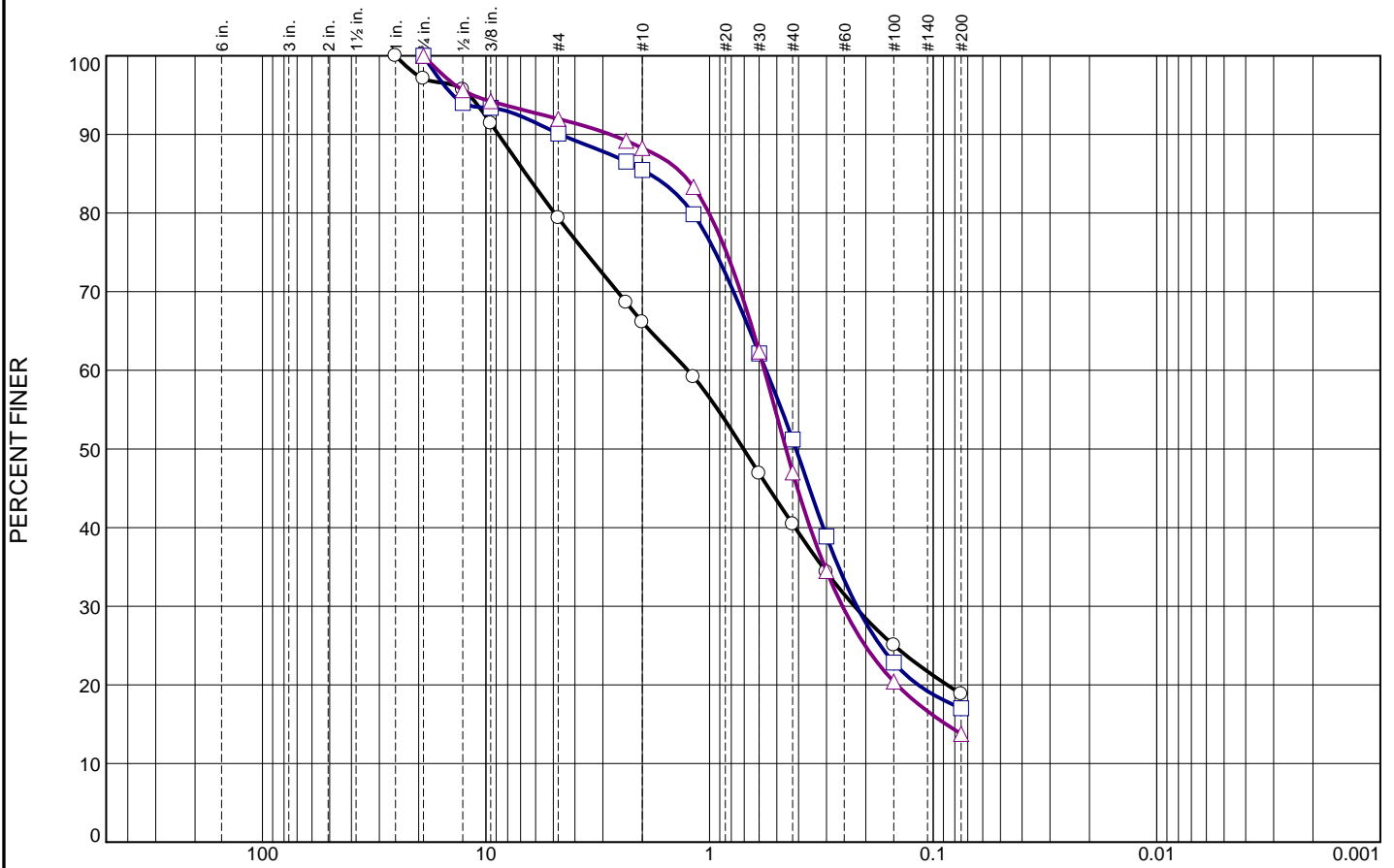
	% +3"		% Gravel		% Sand			% Fines		
			Coarse	Fine	Coarse	Medium	Fine	Silt		Clay
○	0.0		0.0	19.4	12.7	26.6	21.8	19.5		
□	0.0		0.0	15.8	10.1	28.2	15.9	30.0		
△	0.0		0.0	11.3	5.5	57.3	19.2	6.7		
×	LL	PL	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
○	21	18	6.1830	1.1576	0.6890	0.2208				
□	35	15	5.2412	0.8674	0.5360	0.0754				
△			2.4055	0.8058	0.6671	0.4645	0.2859	0.1643	1.63	4.90

MATERIAL DESCRIPTION							TEST DATE	USCS	NM
○ silty sand with gravel							5/3/21	SM	6.7
□ clayey sand with gravel							5/11/21	SC	12.3
△							5/3/21		8.6

Project No. 2784 Client: JUB ENGINEERS Project: MCCARRAN BLVD AND PRATER WAY		Remarks: ○ RECEIVED 4/29/21 □ COMBINED WITH B-1 1B △ RECEIVED 4/29/21
○ Source of Sample: B-1 Depth: 1.0 Sample Number: SG □ Source of Sample: B-1 Depth: 2.50 Sample Number: 1A △ Source of Sample: B-1 Depth: 10.0 Sample Number: 1D		
<div style="display: flex; align-items: center;"> <div style="background-color: #003366; color: white; padding: 5px; font-weight: bold; margin-right: 10px;">CME</div> <div> CONSTRUCTION MATERIALS ENGINEERS, INC. </div> </div>		
PLATE B-1		

Tested By: ○ A. DIXON □ A. SALAZAR △ A. DIXON Checked By: C. JONES

Particle Size Distribution Report



GRAIN SIZE - mm.

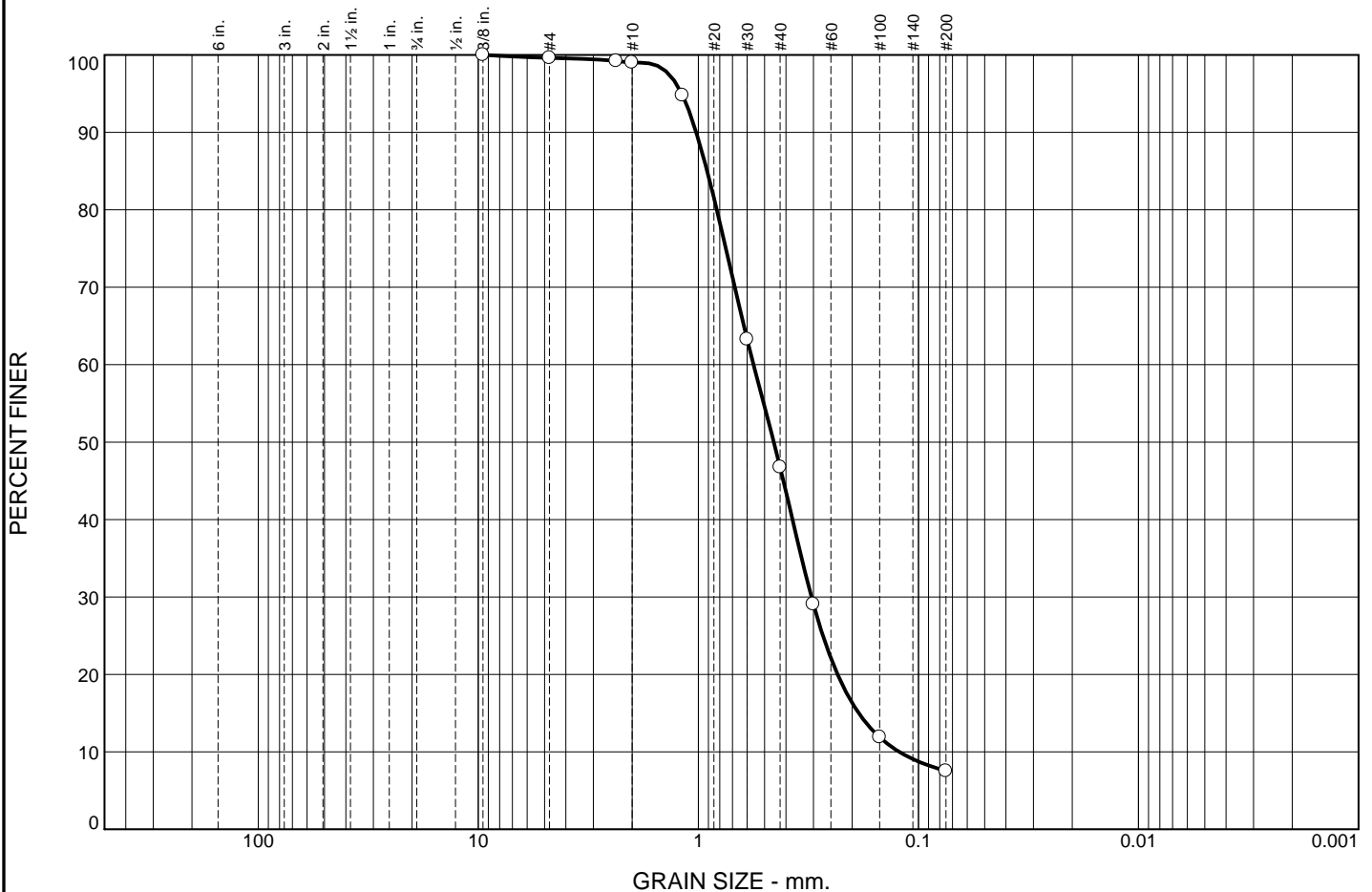
	% +3"		% Gravel		% Sand			% Fines		
			Coarse	Fine	Coarse	Medium	Fine	Silt		Clay
○	0.0		2.9	17.7	13.3	25.6	21.7	18.8		
□	0.0		0.0	9.9	4.6	34.3	34.2	17.0		
△	0.0		0.0	8.0	3.7	41.3	33.2	13.8		
⊗	LL	PL	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
○			6.6327	1.2505	0.7047	0.2249				
□			1.8664	0.5592	0.4106	0.2195				
△			1.3221	0.5682	0.4554	0.2545	0.0875			

MATERIAL DESCRIPTION							TEST DATE	USCS	NM
○							5/4/21		5.9
□							5/3/21		9.0
△							5/3/21		7.3

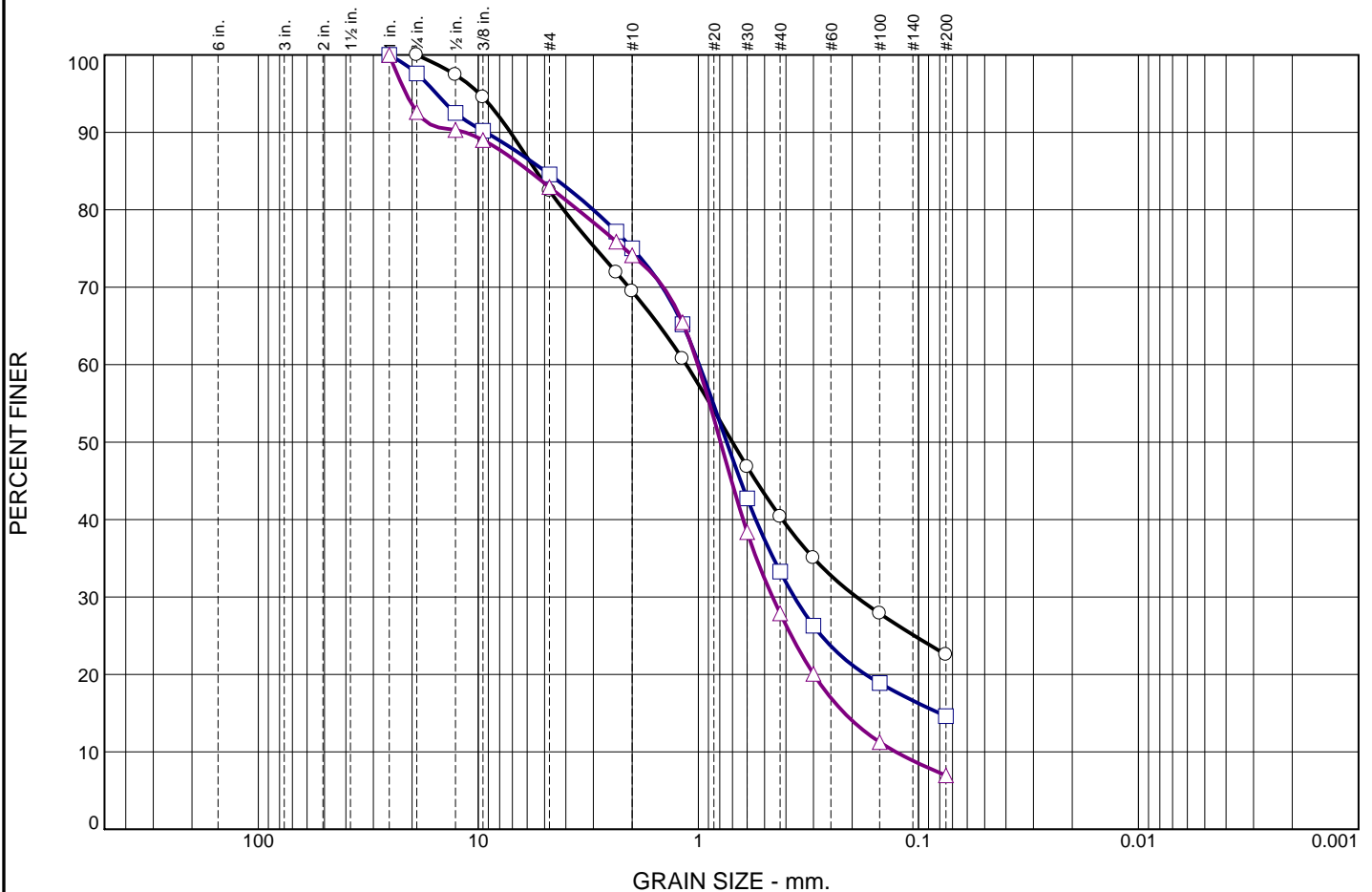
Project No. 2784 Client: JUB ENGINEERS Project: MCCARRAN BLVD AND PRATER WAY		Remarks: ○ RECEIVED 4/29/21 □ RECEIVED 4/29/21 △ RECEIVED 4/29/21
○ Source of Sample: B-2 Depth: 1.0 Sample Number: SG □ Source of Sample: B-2 Depth: 7.5 Sample Number: 2C △ Source of Sample: B-2 Depth: 12.5 Sample Number: 2E		
<div style="display: flex; align-items: center;"> <div style="background-color: #003366; color: white; padding: 5px; font-weight: bold; margin-right: 10px;">CME</div> <div style="font-weight: bold; margin: 0;">CONSTRUCTION MATERIALS ENGINEERS, INC.</div> </div>		
PLATE B-1		

Tested By: ○ S. SCHWEITZER □ A. DIXON △ A. DIXON Checked By: C. JONES

Particle Size Distribution Report



Particle Size Distribution Report



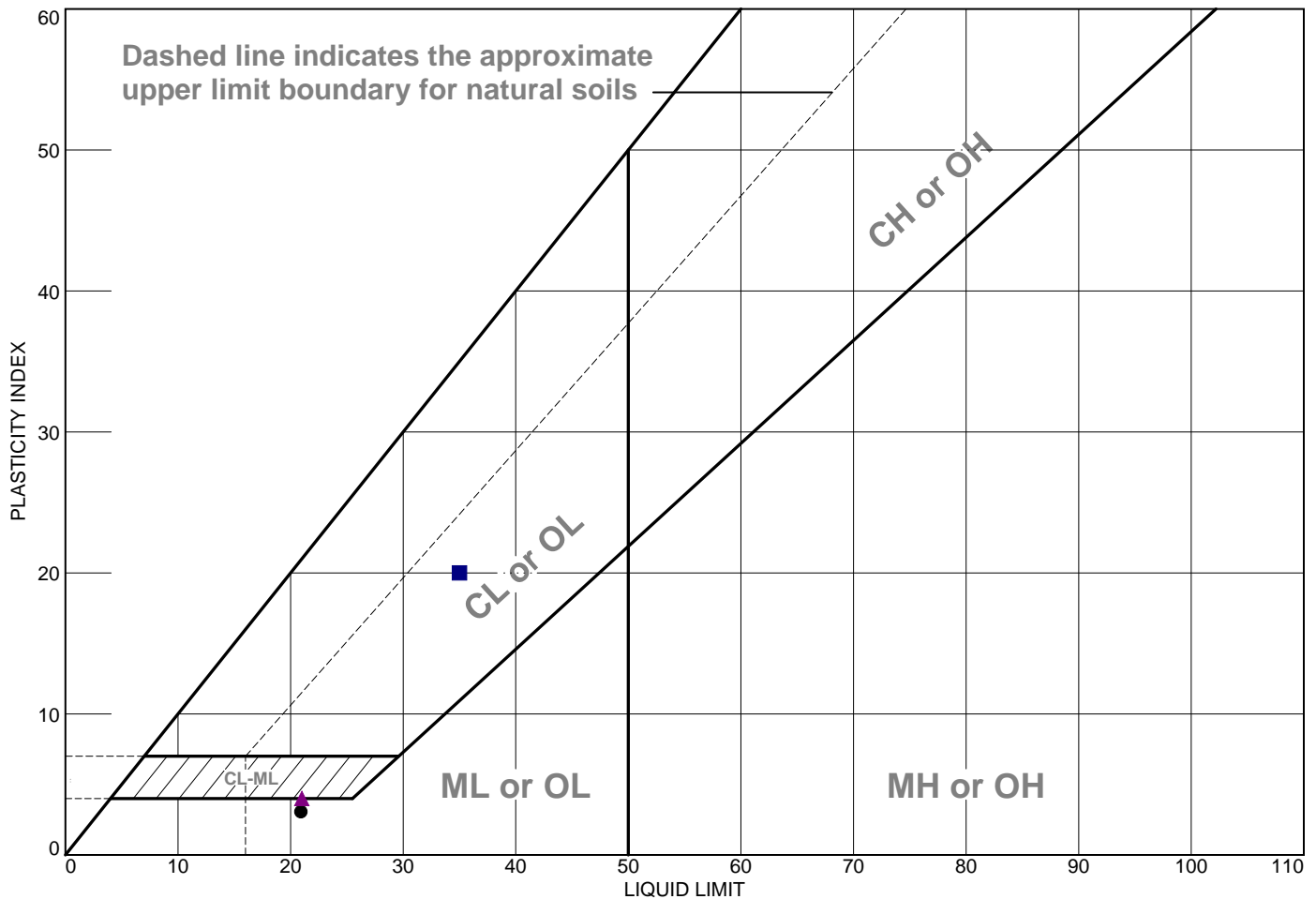
	% +3"		% Gravel		% Sand			% Fines		
			Coarse	Fine	Coarse	Medium	Fine	Silt		Clay
○	0.0		0.0	17.5	13.0	29.1	17.9	22.5		
□	0.0		2.4	13.0	9.6	41.7	18.7	14.6		
△	0.0		7.4	9.7	8.8	46.2	20.9	7.0		
×	LL	PL	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
○	21	17	5.4581	1.1346	0.7007	0.1913				
□			4.9801	0.9912	0.7431	0.3665	0.0803			
△			5.8712	1.0053	0.7929	0.4604	0.2168	0.1269	1.66	7.92

MATERIAL DESCRIPTION							TEST DATE	USCS	NM
○ silty, clayey sand with gravel							5/3/21	SC-SM	7.7
□							5/3/21		10.3
△							5/3/21		13.3

Project No. 2784 Client: JUB ENGINEERS Project: MCCARRAN BLVD AND PRATER WAY		Remarks: ○ RECEIVED 4/29/21 □ RECEIVED 4/29/21 △ RECEIVED 4/29/21
○ Source of Sample: B-3 Depth: 1.0 Sample Number: SG □ Source of Sample: B-3 Depth: 7.5 Sample Number: 3C △ Source of Sample: B-3 Depth: 15.0 Sample Number: 3F		
		PLATE B-1

Tested By: A. DIXON Checked By: C. JONES

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	silty sand with gravel	21	18	3	41.3	19.5	SM
■	clayey sand with gravel	35	15	20	45.9	30.0	SC
▲	silty, clayey sand with gravel	21	17	4	40.4	22.5	SC-SM

Project No. 2784 Client: JUB ENGINEERS

Project: MCCARRAN BLVD AND PRATER WAY

● Source of Sample: B-1 Depth: 1.0 Sample Number: SG
 ■ Source of Sample: B-1 Depth: 2.50 Sample Number: 1A
 ▲ Source of Sample: B-3 Depth: 1.0 Sample Number: SG

Remarks:

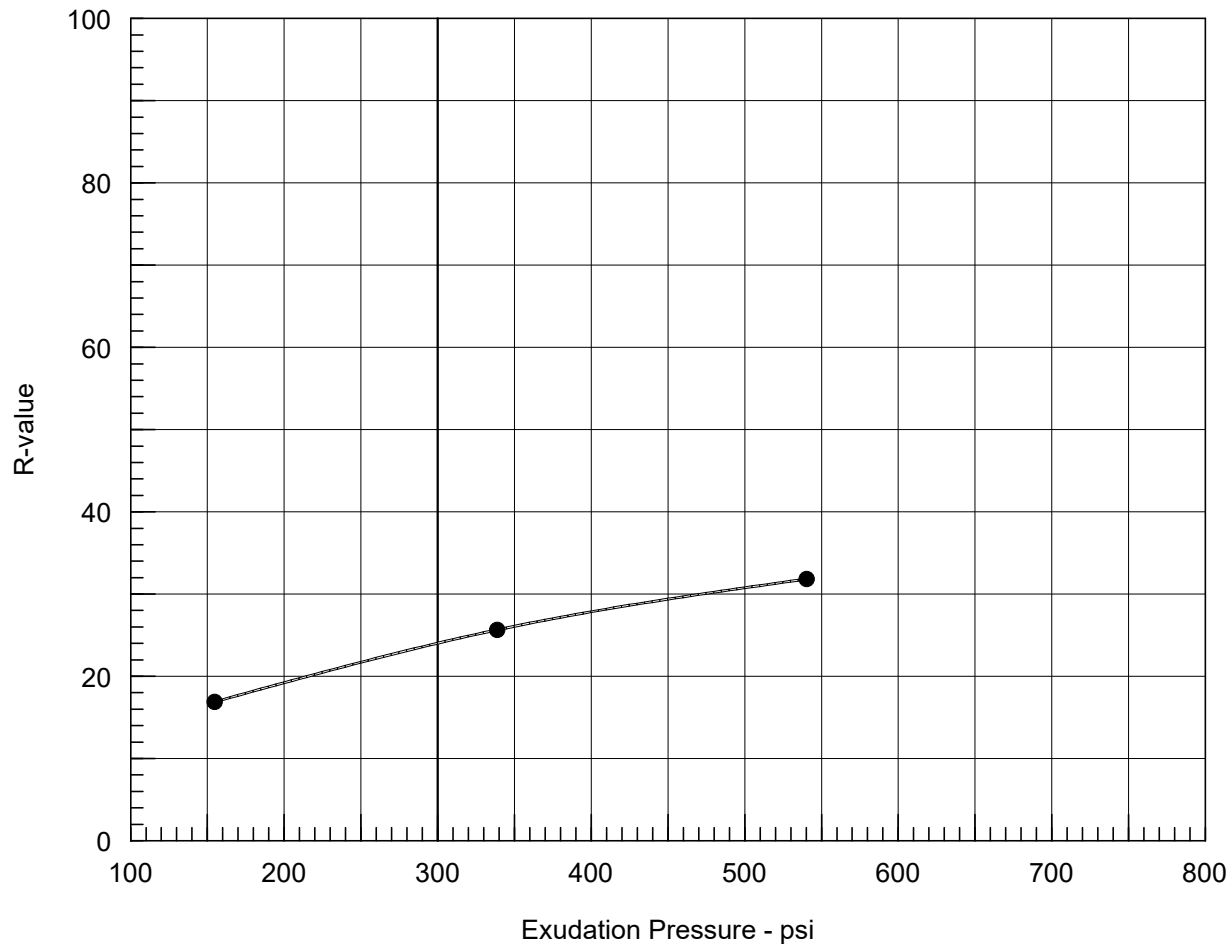
■ COMBINED WITH B-1 1B

CME CONSTRUCTION
MATERIALS
ENGINEERS, INC.

PLATE B-2


Tested By: ○ S. SCHWEITZER □ A. DIXON △ S. SCHWEITZER Checked By: C. JONES

R-VALUE TEST REPORT

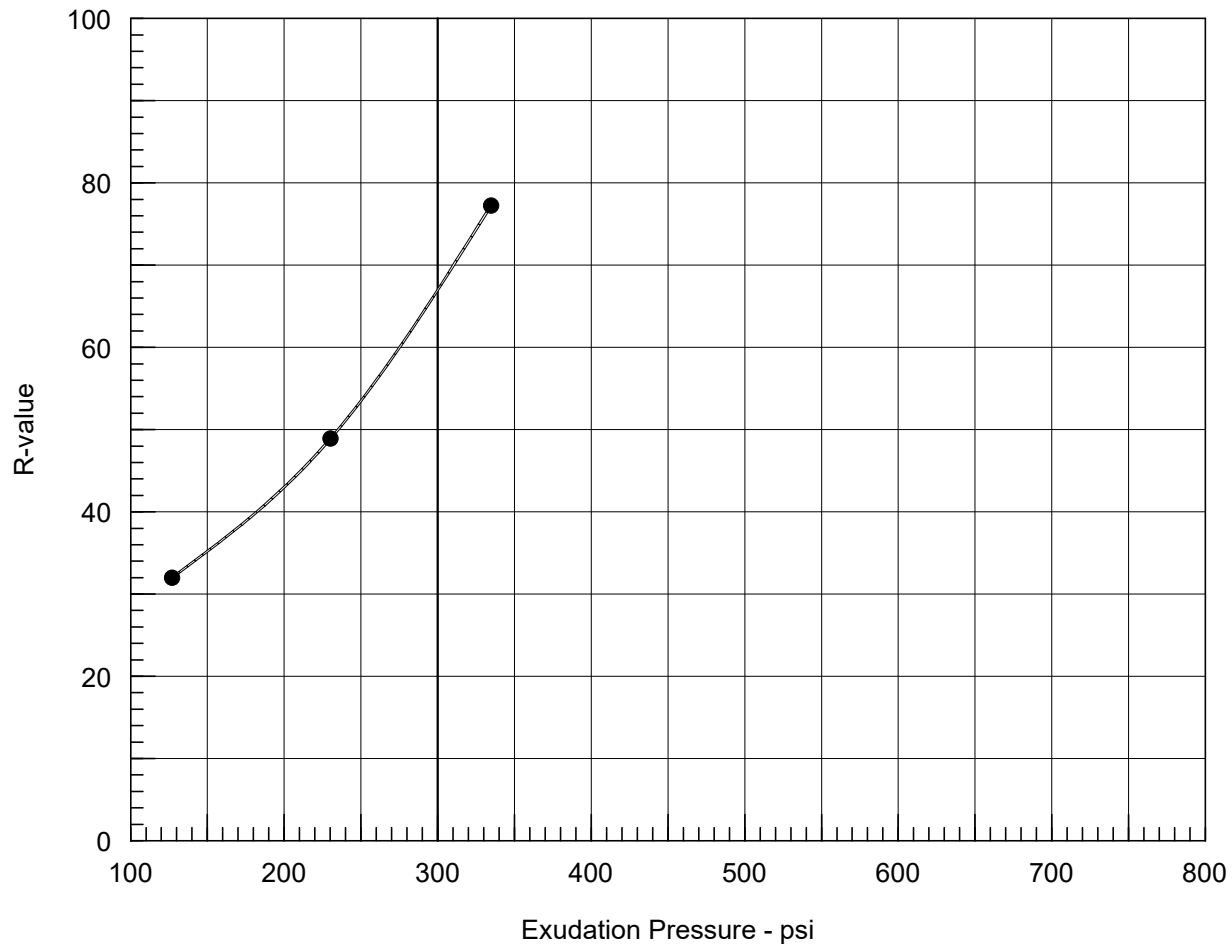


Resistance R-Value and Expansion Pressure - ASTM D2844

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	250	131.1	10.5	0.00	94	2.50	540	31.8	31.8
2	200	130.2	11.0	0.00	102	2.50	339	25.7	25.7
3	150	126.3	12.2	0.00	117	2.55	155	16.9	16.9

Test Results	Material Description
R-value at 300 psi exudation pressure = 24.0	silty sand with gravel
Project No.: 2784 Project: MCCARRAN BLVD AND PRATER WAY Source of Sample: B-1 Depth: 1.0 Sample Number: SG Date: 5/17/2021	Tested by: M. PONTONI Checked by: C. JONES Remarks: RECEIVED 4/29/21
 CONSTRUCTION MATERIALS ENGINEERS, INC.	Page 1 of 1 PLATE B-3

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - ASTM D2844

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	250	132.3	9.6	0.00	24	2.50	335	77.3	77.3
2	250	130.1	10.8	0.00	60	2.50	230	48.9	48.9
3	200	127.7	12.5	0.00	86	2.50	127	32.0	32.0

Test Results

Material Description

R-value at 300 psi exudation pressure = 67.0

Project No.: 2784

Project: MCCARRAN BLVD AND PRATER WAY

Source of Sample: B-2 **Depth:** 1.0

Sample Number: SG

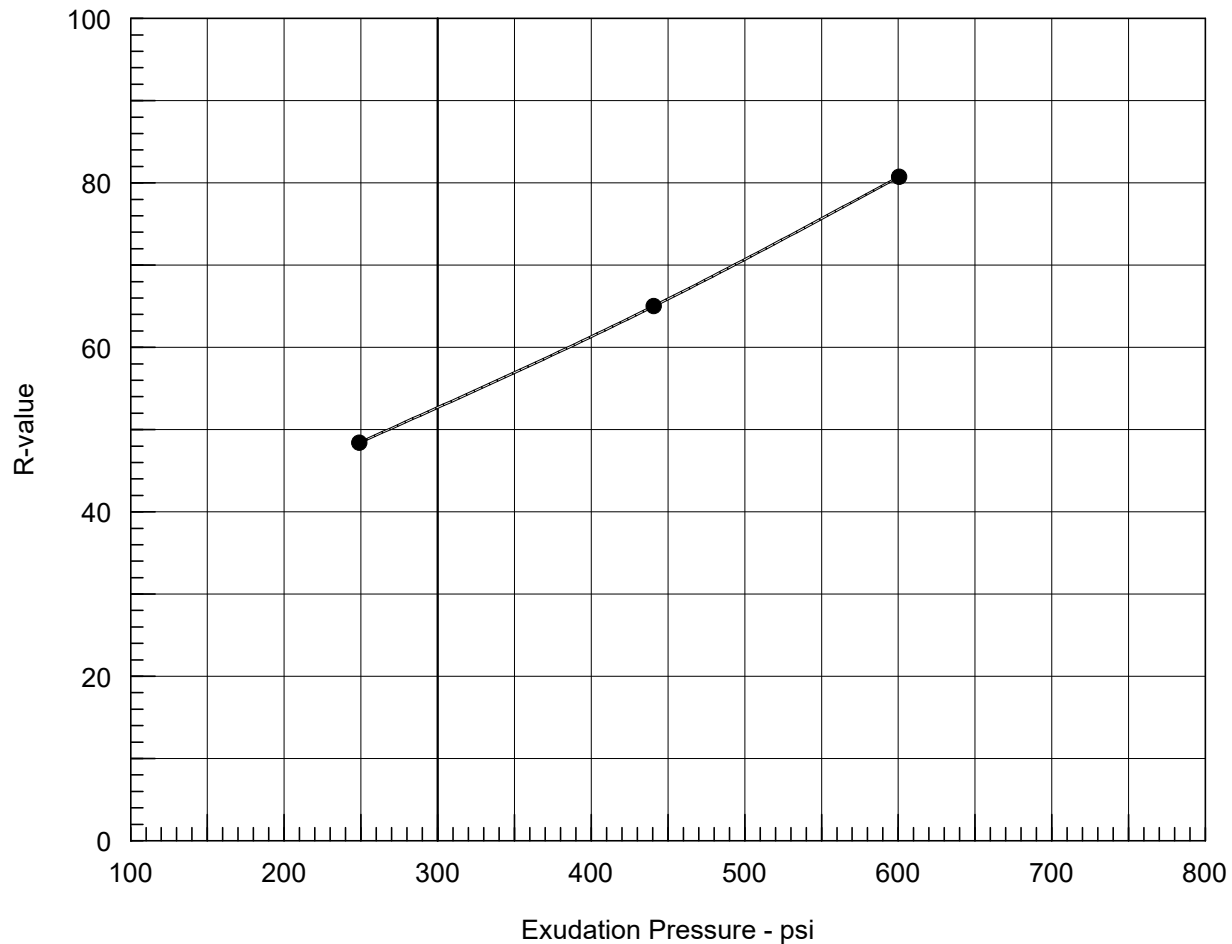
Date: 5/17/2021

Tested by: M. PONTONI

Checked by: C. JONES

Remarks:
RECEIVED 4/29/21

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - ASTM D2844

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	250	133.4	8.9	0.00	20	2.50	600	80.8	80.8
2	250	132.0	9.8	0.00	38	2.50	441	65.0	65.0
3	200	130.5	11.0	0.00	59	2.50	249	48.4	48.4

Test Results

Material Description

R-value at 300 psi exudation pressure = 52.7

silty, clayey sand with gravel

Project No.: 2784

Project: MCCARRAN BLVD AND PRATER WAY

Source of Sample: B-3 **Depth:** 1.0

Sample Number: SG

Date: 5/17/2021

Tested by: M. PONTONI

Checked by: C. JONES

Remarks:
RECEIVED 4/29/21



Silver State Labs-Reno
1135 Financial Blvd
Reno, NV 89502
(775) 857-2400 FAX: (888) 398-7002
www.ssalabs.com

Analytical Report

Workorder#: 21050138
Date Reported: 5/18/2021

Client: CME-Construction Materials Engineers, Inc
Project Name: 2784 McCarran and Par/B-1 1E 12.5'-14.0
PO #: 2663

Sampled By: Client

Laboratory Accreditation Number: NV015/CA2990

Laboratory ID	Client Sample ID	Date/Time Sampled	Date Received
21050138-01	B-1 1E 12.5'-14.0'	04/29/2021 0:00	5/4/2021

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Sulfate	ASTM 1580C	< 0.02	%	0.02	AC	05/18/2021 10:36	

Laboratory Accreditation Number: NV015/CA2990

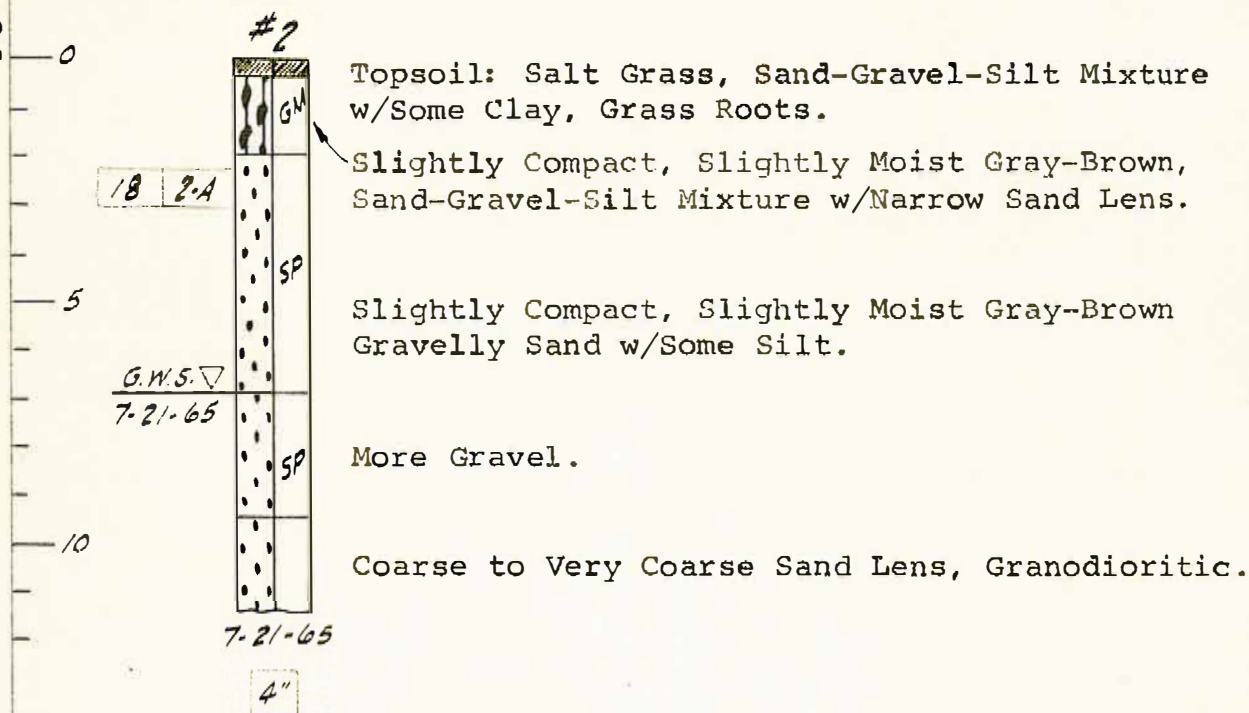
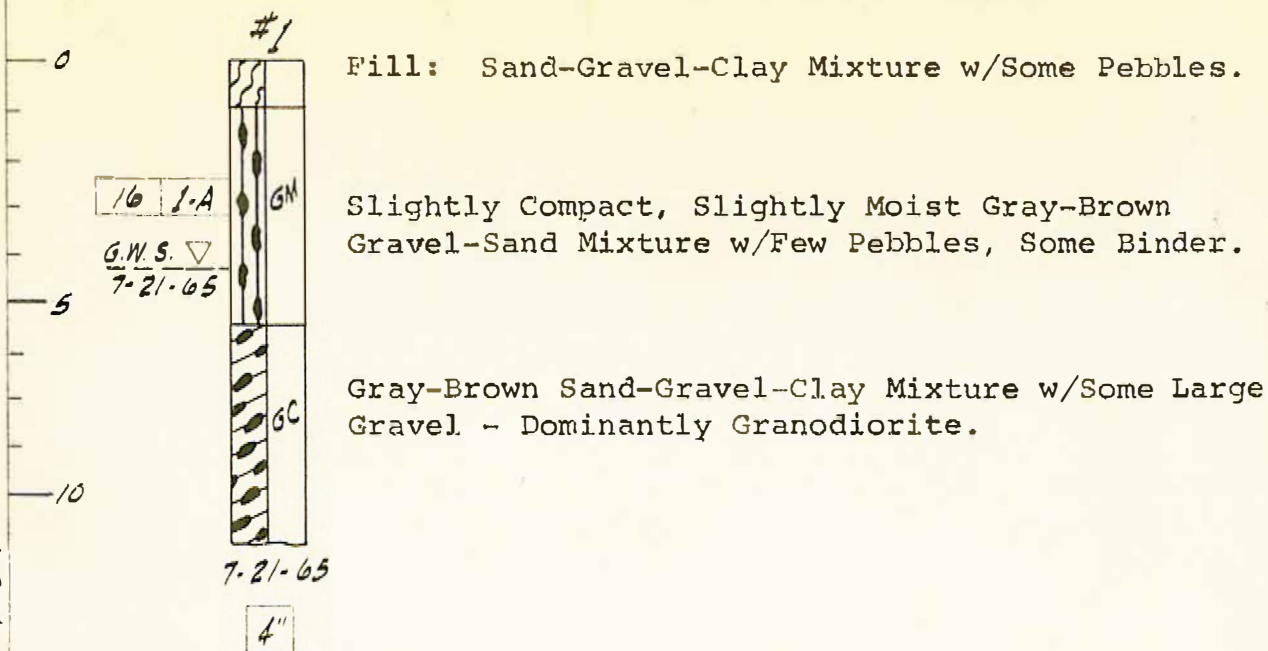
Laboratory ID	Client Sample ID	Date/Time Sampled	Date Received
21050138-02	B-3 3F 15.0-16.5'	04/29/2021 0:00	5/4/2021

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Sulfate	ASTM 1580C	< 0.02	%	0.02	AC	05/18/2021 10:36	

APPENDIX C



DEPTH (1"=4'-0")



LEGEND:

UNCONFINE COMPRESSIVE STRENGTH (T/SQ.FT.)

POUND PER FT. (140# HAMMER 30" DROP)

SAMPLE NO.

FIELD MOISTURE %

DRY DENSITY - LBS./SQ.FT.

G.W.S. ▽ (GROUND WATER SURFACE)

DATE MADE 7-21-65

LOG OF BORINGS

9369-65

Page 135

FOUNDATION ENGINEERING

SPROUT ENGINEERS, INC.

DATE 7-21-65

LOG OF BORING

PROJECT Woodside Subdivision

BORING NO. _____ 1

LOGGED BY L. Johnson

SIZE OF BORING _____ 6 INCHES

DATE BEGUN 7/7/71

GROUND ELEVATION_____

DATE FINISHED 7/7/71

GROUND WATER ELEVATION -5.0'

TYPE OF BORING _____ AUGER X WATER

DATE GROUND WATER MEASURED 7/7/71

[illegible]

EXPLANATION

Number Of Blows:

RECORD NUMBER OF BLOWS FOR ONE FOOT PENETRATION OF SAMPLER USING 140 POUND HAMMER FALLING 30 INCHES.

Description

DESCRIBE SOIL TYPE BY UNIFIED SOIL CLASSIFICATION SYSTEM WITH EMPHASIS ON IN-PLACE OR NATURAL CONDITION.

LOG OF BORING

PROJECT Woodside Subdivision

BORING NO.

2

LOGGED BY L. Johnson

SIZE OF BORING

6 INCHES

DATE BEGUN 7/7/71

GROUND ELEVATION

DATE FINISHED 7/7/71

GROUND WATER ELEVATION-4.5'

TYPE OF BORING _____ AUGER X WATER

DATE GROUND WATER MEASURED. 7/7/71

[illegible]

EXPLANATION

Number Of Blows:

RECORD NUMBER OF BLOWS FOR ONE FOOT PENETRATION OF SAMPLER USING 140 POUND HAMMER FALLING 30 INCHES.

Description:

DESCRIBE SOIL TYPE BY UNIFIED SOIL CLASSIFICATION SYSTEM WITH EMPHASIS ON IN-PLACE OR NATURAL CONDITION:

CONSULTING ENGINEERS / PLANNERS

FOUNDATION ENGINEERING
SOILS INVESTIGATION

LOG OF BORING

PROJECT Woodside Subdivision BORING NO. 3
 LOGGED BY L. Johnson SIZE OF BORING 6 INCHES
 DATE BEGUN 7/7/71 GROUND ELEVATION _____
 DATE FINISHED 7/7/71 GROUND WATER ELEVATION -1.3'
 TYPE OF BORING AUGER ☒ WATER DATE GROUND WATER MEASURED 7/7/71

[illegible]

EXPLANATION

Number Of Blows:

RECORD NUMBER OF BLOWS FOR ONE FOOT PENETRATION OF SAMPLER USING 140 POUND HAMMER FALLING 30 INCHES.

Description:

DESCRIBE SOIL TYPE BY UNIFIED SOIL CLASSIFICATION SYSTEM WITH EMPHASIS ON IN-PLACE OR NATURAL CONDITION.

CONSULTING ENGINEERS/PLANNERS

FOUNDATION ENGINEERING
SOILS INVESTIGATION

LOG OF BORING

PROJECT Woodside Subdivision BORING NO. 4
 LOGGED BY L. Johnson SIZE OF BORING 6 INCHES
 DATE BEGUN 7/7/71 GROUND ELEVATION _____
 DATE FINISHED 7/7/71 GROUND WATER ELEVATION -1.5'
 TYPE OF BORING AUGER X WATER _____ DATE GROUND WATER MEASURED 7/7/71

[illegible]

EXPLANATION

Number Of Blows:

RECORD NUMBER OF BLOWS FOR ONE FOOT PENETRATION OF SAMPLER USING 140 POUND HAMMER FALLING 30 INCHES.

Description:

DESCRIBE SOIL TYPE BY UNIFIED SOIL CLASSIFICATION SYSTEM WITH EMPHASIS ON IN-PLACE OR NATURAL CONDITION.

CONSULTING ENGINEERS / PLANNERS

FOUNDATION ENGINEERING
SOILS INVESTIGATION

Page 139
#7158

PLATE 2D

LOG OF BORING

PROJECT Woodside Subdivision BORING NO. 9
 LOGGED BY L. Johnson SIZE OF BORING 6 INCHES
 DATE BEGUN 7/7/71 GROUND ELEVATION ----
 DATE FINISHED 7/7/71 GROUND WATER ELEVATION ----
 TYPE OF BORING AUGER X WATER ---- DATE GROUND WATER MEASURED 7/7/71

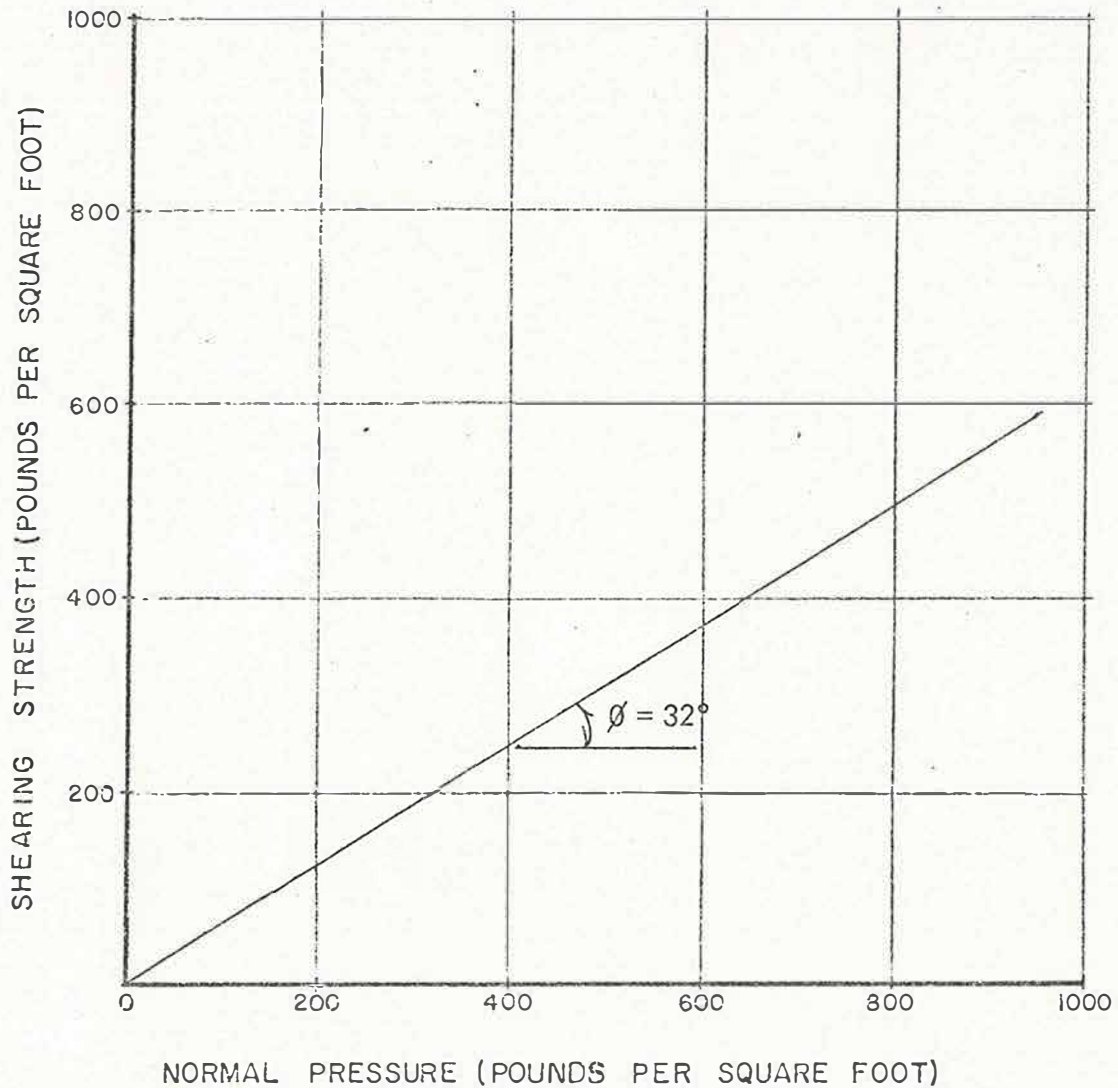
NOTES	SAMPLE NUMBER	MOISTURE PERCENT	NUMBER OF BLOWS	DEPTH	LOG	DESCRIPTION
Water running into hole from surface	9A		11	2		Moist, Slightly Compact, Brown Silty Sand with 20% nonplastic fines and 80% fine to medium grained sand. Moist to Wet, Slightly Compact, Grey poorly graded sand with occasional gravel lenses.
				4		
				6		
				8		
				10		
				12		

EXPLANATION

Number Of Blows: RECORD NUMBER OF BLOWS FOR ONE FOOT PENETRATION OF SAMPLER USING 140 POUND HAMMER FALLING 30 INCHES.
 Description: DESCRIBE SOIL TYPE BY UNIFIED SOIL CLASSIFICATION SYSTEM WITH EMPHASIS ON IN-PLACE OR NATURAL CONDITION.

CONSULTING ENGINEERS / PLANNERS
 FOUNDATION ENGINEERING
 SOILS INVESTIGATION

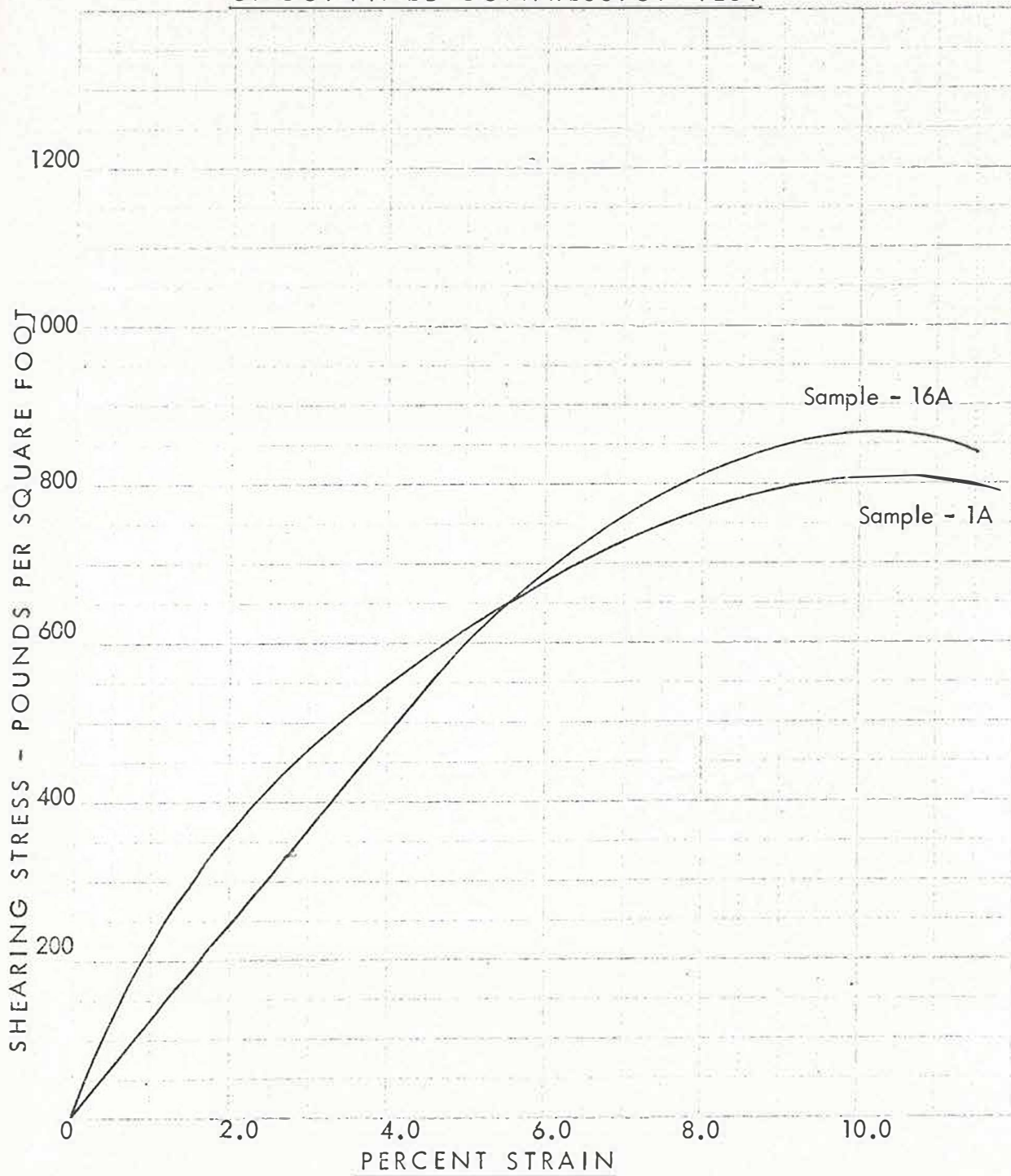
SHEAR STRENGTH DIAGRAM
DIRECT SHEAR TEST



Sample No. - 1B
SP - Poorly Graded Sand
Depth - 5.5 to 7.0 Feet
Sample Remolded and Saturated
In-Place Moisture Content - 23.9 Percent

Project No. 71158

UNCONFINED COMPRESSION TEST



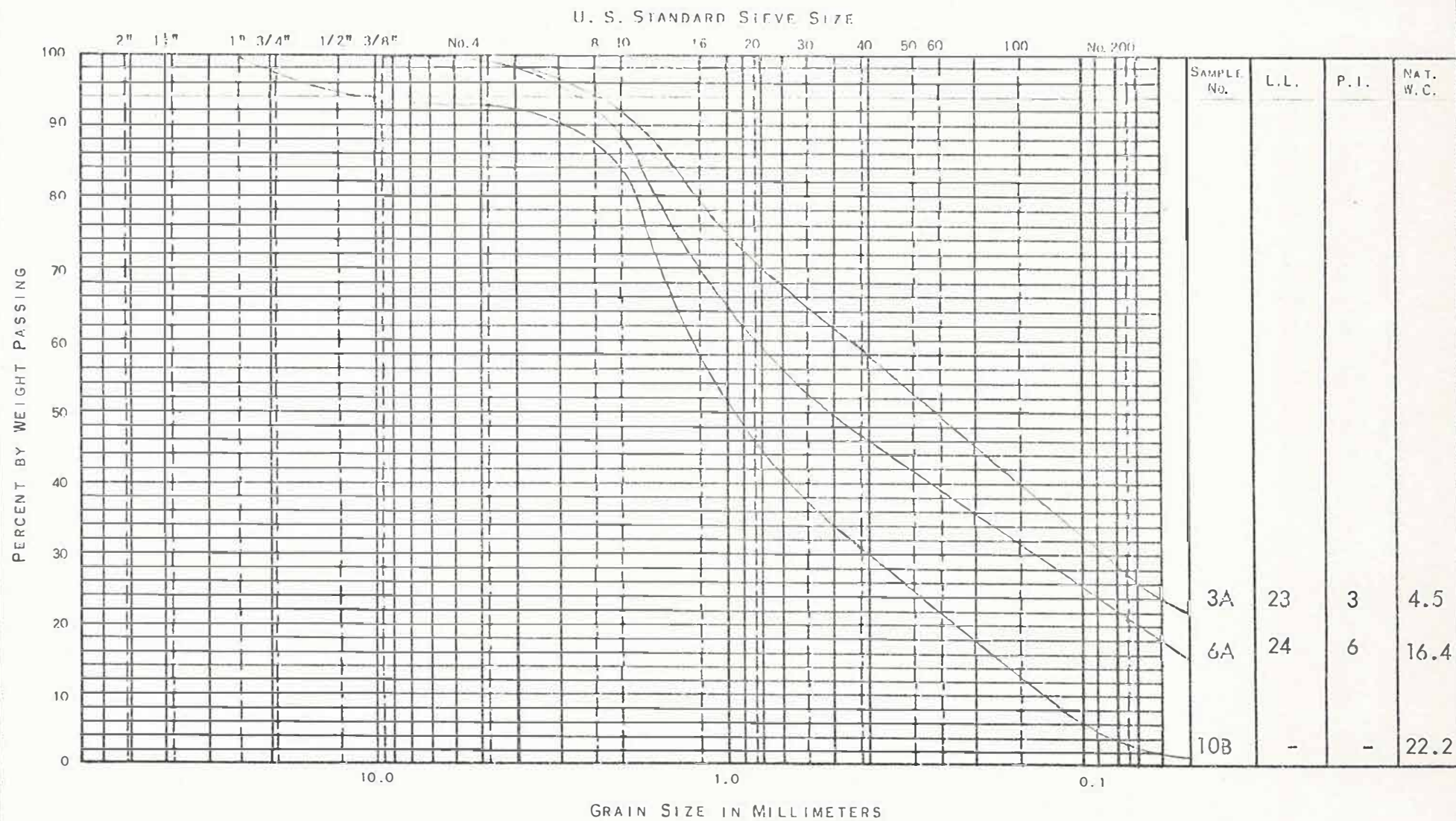
Sample 1A - Silty Sand
 Depth 1.5 - 3.0 Feet
 In-Place Dry Density - 100
 100.7 lbs./cu. ft.
 In-Place Moisture Content -
 20.2 Percent

Sample 16A - Silty Sand
 Depth 1.0 - 2.5 Feet
 In-Place Dry Density
 104.2 lbs./cu. ft.
 In-Place Moisture Content -
 18.8 Percent

Project No. 71158

CONSULTING ENGINEERS/PLANNERS

Plate 5
 Page 142



GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

GRADATION CURVES

TEST RESULTS

MECHANICAL ANALYSIS

<u>Sample No.</u>	<u>3A</u>	<u>6A</u>	<u>10B</u>	<u>11A</u>	<u>12B</u>	<u>16B</u>
U. S. Standard Sieve Size	<u>Percent by Weight Passing</u>					
1 inch			100	100	100	
3/4 inch			97	90	97	
1/2 inch	--	--	94	90	97	--
3/8 inch	100	100	94	89	95	100
No. 4	99	99	93	88	93	97
No. 40	59	47	31	51	20	39
No. 200	29	21	3	22	2	3

ATTERBERG LIMITS

Liquid Limit	23	24	--	24	--	--
Plastic Index	3	6	--	2	--	--

<u>In-Place Water</u> <u>Content</u>	4.5	16.4	22.2	16.1	20.3	23.4
---	-----	------	------	------	------	------

CHEMICAL ANALYSIS

<u>Sample Number</u>	<u>11B</u>	<u>12A</u>	<u>15A</u>
Soluble Sulfates In Parts Per Million	10	16	12

LOG OF BORING

PROJECT <u>Sierra Meadows No. 7</u>	BORING NO. <u>2</u>
LOGGED BY <u>L. Johnson</u>	SIZE OF BORING <u>6</u> INCHES
DATE BEGUN <u>8/29/72</u>	GROUND ELEVATION <u>4402 (Topo)</u>
DATE FINISHED <u>8/29/72</u>	GROUND WATER ELEVATION <u>4397.0</u>
TYPE OF BORING <u>AUGER</u> <input checked="" type="checkbox"/> <u>WATER</u>	DATE GROUND WATER MEASURED <u>8/29/72</u>

[illegible]

EXPLANATION

Number Of Blows:

RECORD NUMBER OF BLOWS FOR ONE FOOT PENETRATION OF SAMPLER USING 140 POUND HAMMER FALLING 30 INCHES.

Description:

DESCRIBE SOIL TYPE BY UNIFIED SOIL CLASSIFICATION SYSTEM WITH EMPHASIS ON
IN PLACE OR NATURAL CONDITION.

The first part of the paper is devoted to the study of the asymptotic behavior of the solution of the problem (1.1)–(1.3) as $\epsilon \rightarrow 0$. In the second part, the asymptotic expansion of the solution is constructed. In the third part, the asymptotic expansion of the solution is used to construct the asymptotic expansion of the solution of the problem (1.1)–(1.3) as $\epsilon \rightarrow 0$.

CONSULTING ENGINEERS / PLANNERS

FOUNDATION ENGINEERING
SOILS INVESTIGATION

Page 745325

PLATE 2b

LOG OF BORING

PROJECT Sierra Meadows No. 7 BORING NO. 4
 LOGGED BY L. Johnson SIZE OF BORING 6 INCHES
 DATE BEGUN 8/30/72 GROUND ELEVATION 4406 (Topo)
 DATE FINISHED 8/30/72 GROUND WATER ELEVATION 4395.0
 TYPE OF BORING AUGER ☒ WATER DATE GROUND WATER MEASURED 8/30/72

[illegible]

EXPLANATION

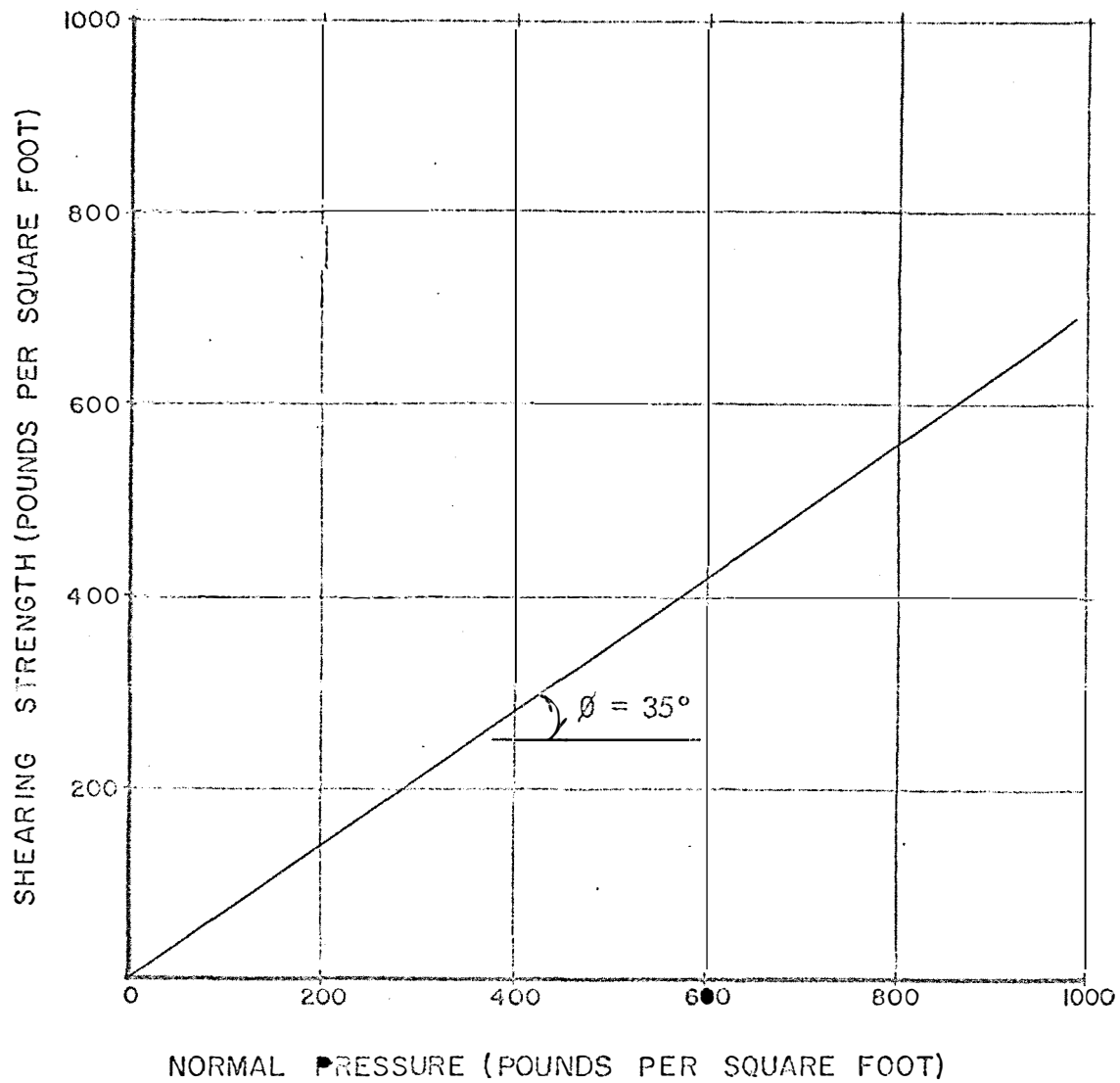
Number Of Blows: RECORD NUMBER OF BLOWS FOR ONE FOOT PENETRATION OF SAMPLER USING 140 POUND HAMMER FALLING 30 INCHES.

Description: DESCRIBE SOIL TYPE BY UNIFIED SOIL CLASSIFICATION SYSTEM WITH EMPHASIS ON IN-PLACE OR NATURAL CONDITION.

CONSULTING ENGINEERS/PLANNERS
FOUNDATION ENGINEERING
SOILS INVESTIGATION

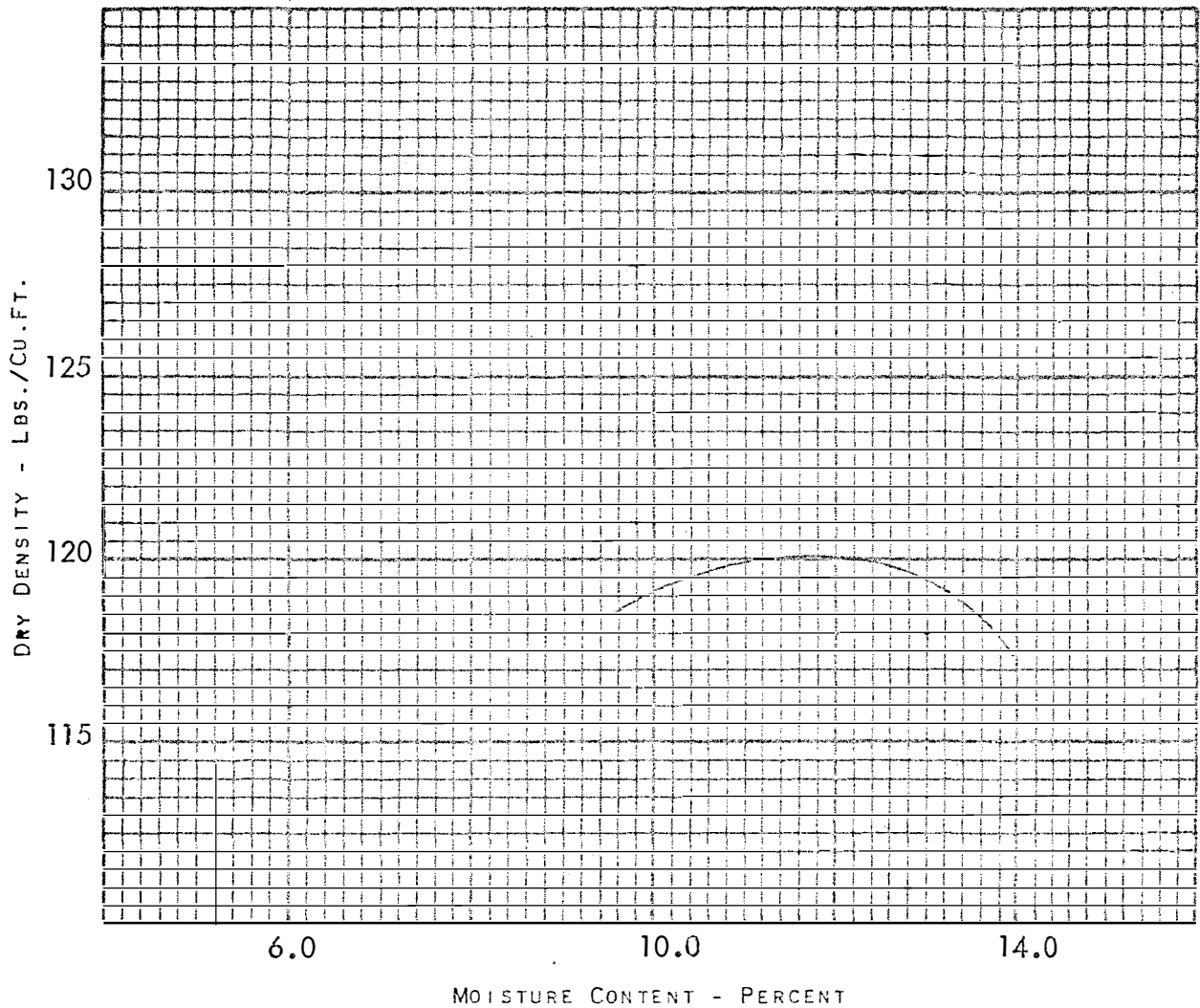
SHEAR STRENGTH DIAGRAM

DIRECT SHEAR TEST



Sample 4B - Poorly Graded Sand
Depth - 5'-6'
In-Place Moisture Content = 6.1%
Sample Remolded and Saturated

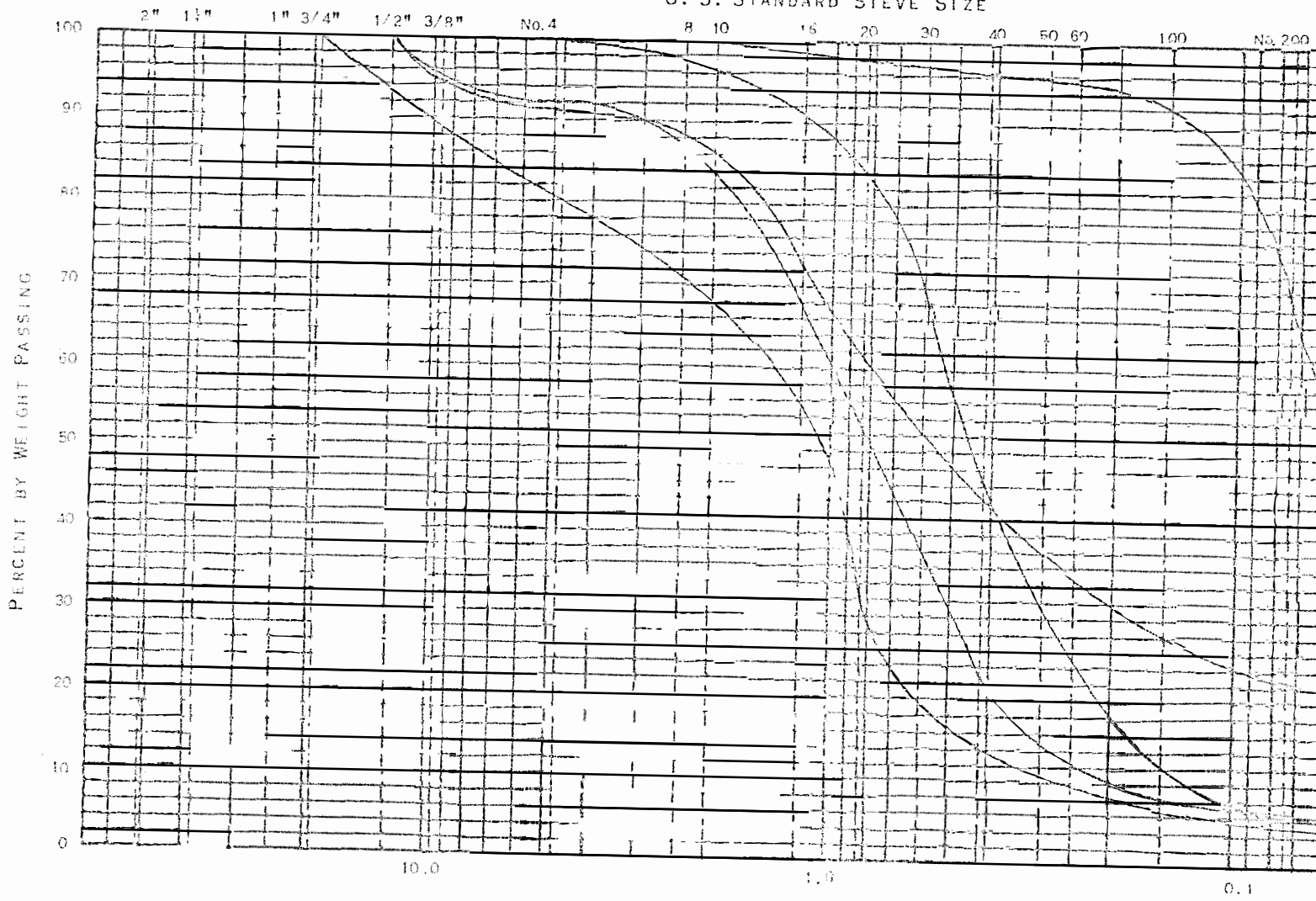
MOISTURE-DENSITY CURVE



PROJECT Sierra Meadows No. 7 MAXIMUM DRY DENSITY 120.1 LBS./CU.FT.
 MATERIAL SM - Silty Sand OPTIMUM MOISTURE 11.8 PERCENT

METHOD OF TESTING: AASHTO T180.57

U. S. STANDARD SIEVE SIZE



SAMPLE No.	L.L.	P.I.	NAT. W.C.
1B	43.3	NP	38.5
3A	--	NP	14.5
4A	--	NP	14.5
5A	--	--	12.5
2C	--	--	19.1

GRAIN SIZE IN MILLIMETERS

GRAVEL

SAND

COARSE

FINE

COARSE

MEDIUM

FINE

SILT OR CLAY

GRADATION CURVES

TEST RESULTSMECHANICAL ANALYSIS:

<u>Sample No.</u>	<u>1B</u>	<u>2C</u>	<u>3A</u>	<u>4A</u>	<u>5A</u>
<u>U.S. Standard Sieve Size</u>	<u>Percent by Weight Passing</u>				
3/4 inch		100	---	---	---
1/2 inch		94	100		100
3/8 inch		89	94	---	95
No. 4	---	80	91	100	92
No. 10	100	68	86	96	84
No. 40	96	14	44	46	23
No. 100	92	7	28	12	8
No. 200	69	5	22	6	6
<u>Atterberg Limits</u>					
Liquid Limit	43.3	---	---	---	---
Plastic Index	N.P.	---	N.P.	---	---
<u>Dry Density - lbs/cu.ft.</u>	76.2	113.7	114.7	117.0	114.7
<u>Moisture Content - %</u>	38.5	19.1	14.2	5.7	5.8
<u>Relative Density</u>	---	94.7	95.5	97.4	95.5

CHEMICAL ANALYSIS:

<u>Sample No.</u>	<u>3A</u>	<u>4A</u>	<u>5A</u>
<u>Soluble Sulfates, Parts per Million</u>	800	480	670

LOG OF BORING

PROJECT Sutter Hill

BORING NO. 1

LOGGED BY Larry J. Johnson

SIZE OF BORING 8 INCHES

DATE BEGUN 8-25-73

GROUND ELEVATION _____

DATE FINISHED 8-25-73

GROUND WATER ELEVATION (-7')

TYPE OF BORING____AUGER_X____WATER____

DATE GROUND WATER MEASURED 8-25-73

[illegible]

EXPLANATION

Number Of Blows:

RECORD NUMBER OF BLOWS FOR ONE FOOT PENETRATION OF SAMPLER USING 140 POUND HAMMER FALLING 30 INCHES.

Description:

DESCRIBE SOIL TYPE BY UNIFIED SOIL CLASSIFICATION SYSTEM WITH EMPHASIS ON IN-PLACE OR NATURAL CONDITION.

CONSULTING ENGINEERS/PLANNERS

FOUNDATION ENGINEERING
SOILS INVESTIGATION

LOG OF BORING

PROJECT Suff er Hill BORING NO. 4
 LOGGED BY Larry J. Johnson SIZE OF BORING 8 INCHES
 DATE BEGUN 8-25-73 GROUND ELEVATION _____
 DATE FINISHED 8-25-73 GROUND WATER ELEVATION (-6.5)
 TYPE OF BORING AUGER X WATER DATE GROUND WATER MEASURED 8-25-73

NOTES	SAMPLE NUMBER	MOISTURE PERCENT	NUMBER OF BLOWS	DEPTH	LOG	DESCRIPTION
				2'		Dry, slightly compact, brown, fine to medium grained <u>Silty Sand</u> .
	4A		18	4'		Dry to wet, slightly compact to dense, grey, interbedded fine to medium grained <u>Poorly Graded Sand</u> and <u>Sandy Gravel</u> with numerous cobbles.
				6'		
	4B		24	8'		
				10'		
				12'		
	4C		28	14'		
				16'		
				18'		
	4D		47			
				20'		

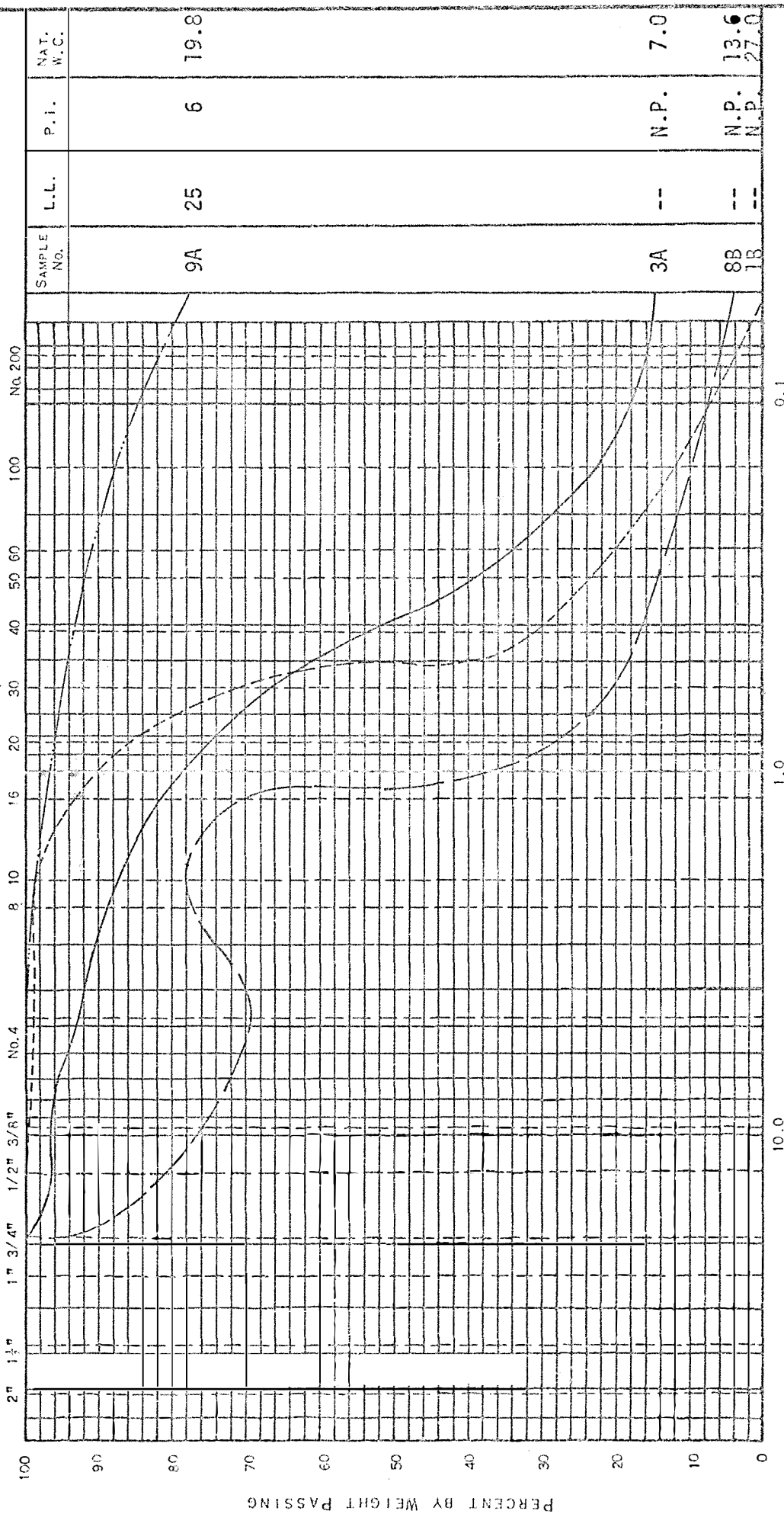
EXPLANATION

Number Of Blows: RECORD NUMBER OF BLOWS FOR ONE FOOT PENETRATION OF SAMPLER USING 140 POUND HAMMER FALLING 30 INCHES.

Description: DESCRIBE SOIL TYPE BY UNIFIED SOIL CLASSIFICATION SYSTEM WITH EMPHASIS ON IN-PLACE OR NATURAL CONDITION.

CONSULTING ENGINEERS / PLANNERS
 FOUNDATION ENGINEERING
 SOILS INVESTIGATION

U. S. STANDARD SIEVE SIZE



GRAIN SIZE IN MILLIMETERS

GRAVEL		SAND			SILT OR CLAY	
COARSE	FINE	COARSE	MEDIUM	FINE		

GRADATION CURVES

73292
MATERIAL TESTING

TEST RESULTSMechanical Analysis

<u>Sample No.</u> <u>U.S. Standard</u> <u>Sieve Size</u>	<u>1B</u>	<u>3A</u>	<u>6B</u>	<u>8B</u>	<u>9A</u>	<u>14A</u>
	<u>Percent by Weight Passing</u>					
3/4"	100	100	100	91	100	100
1/2"	100	96	83	82	100	99
3/8"	100	96	76	77	100	97
No. 4	99	93	69	69	100	93
No. 10	99	87	56	78	99	86
No. 40	31	54	23	17	93	61
No. 200	3	16	5	6	82	31
<u>Atterberg Limits:</u>						
Liquid Limit	--	--	--	--	25	29
Plastic Index	NP	NP	NP	NP	6	10
Moisture Content	27.0	7.0	17.0	13.6	19.8	10.0

LOG OF BORING

PROJECT Helms Shopping Center BORING NO. 1
 LOGGED BY Larry J. Johnson SIZE OF BORING 8 INCHES
 DATE BEGUN 2-20-74 GROUND ELEVATION 4,396 (Topo)
 DATE FINISHED 2-20-74 GROUND WATER ELEVATION 4,383 (-13')
 TYPE OF BORING AUGER X WATER DATE GROUND WATER MEASURED 2-20-74

NOTES	SAMPLE NUMBER	MOISTURE PERCENT	NUMBER OF BLOWS	DEPTH	LOG	DESCRIPTION
	1A		10	2'		Dry, slightly compact to dense, brown, Silty Sand with 15% nonplastic fines, and 85% fine to medium grained sand.
	1B		75	4'		Dry to wet, compact to dense, brown to grey: Silty Sand - Poorly Graded Sand with 10% nonplastic fines, and fine to medium grained sand.
	1C	5.7	42	8'		
	1D		27	14'		

EXPLANATION

Number Of Blows: RECORD NUMBER OF BLOWS FOR ONE FOOT PENETRATION OF SAMPLER USING 140 POUND HAMMER FALLING 30 INCHES.
 Description: DESCRIBE SOIL TYPE BY UNIFIED SOIL CLASSIFICATION SYSTEM WITH EMPHASIS ON IN-PLACE OR NATURAL CONDITION.

CONSULTING ENGINEERS / PLANNERS

FOUNDATION ENGINEERING
 SOILS INVESTIGATION

LOG OF BORING

PROJECT Helms Shopping Center BORING NO. 14
 LOGGED BY Larry J. Johnson SIZE OF BORING 8 INCHES
 DATE BEGUN 2-21-74 GROUND ELEVATION 4,396 (Topo)
 DATE FINISHED 2-21-74 GROUND WATER ELEVATION Not Encountered
 TYPE OF BORING AUGER ☒ WATER ☐ DATE GROUND WATER MEASURED _____

[illegible]

EXPLANATION

Number Of Blows:

RECORD NUMBER OF BLOWS FOR ONE FOOT PENETRATION OF SAMPLER USING 140 POUND HAMMER FALLING 30 INCHES.

Description:

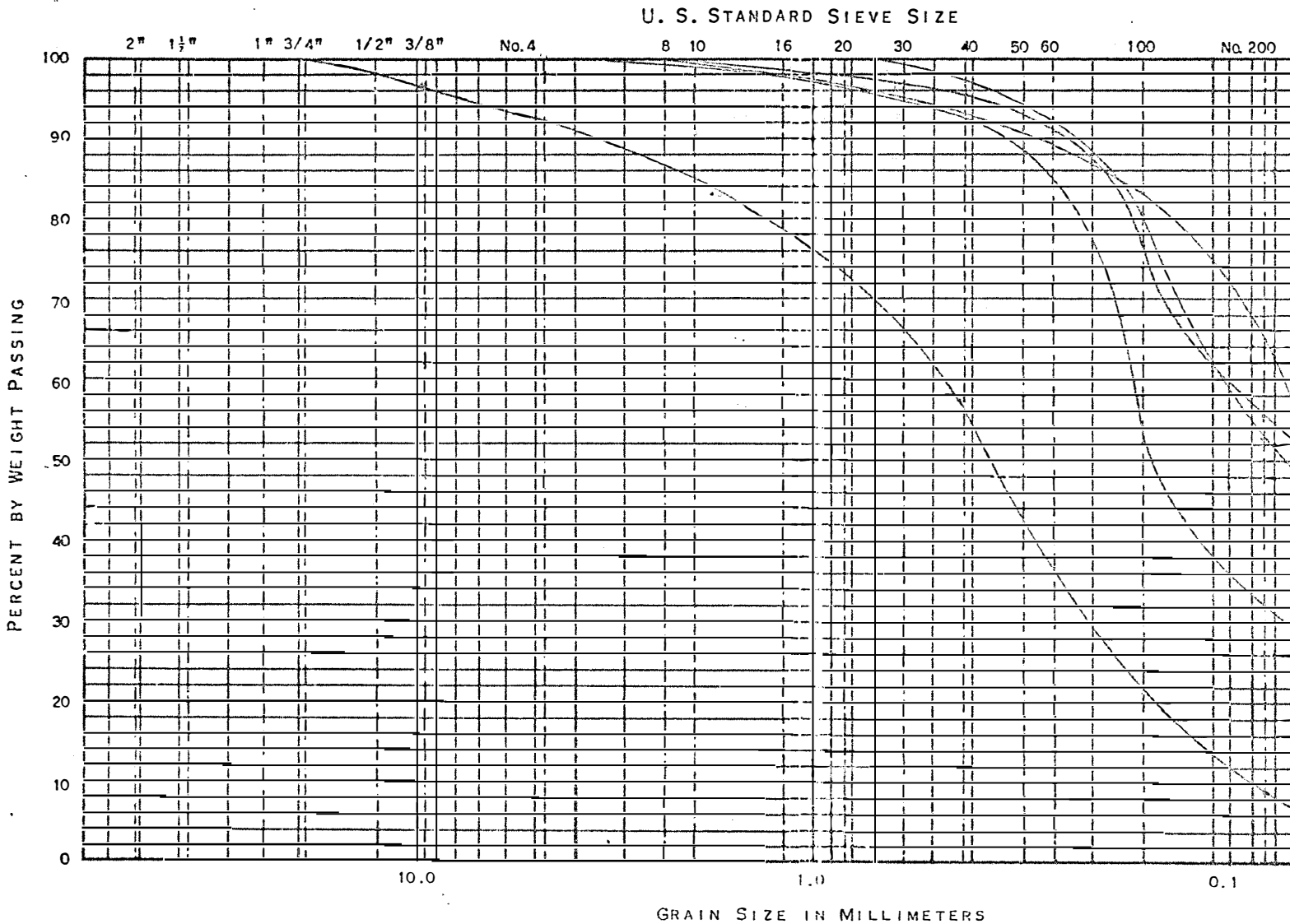
DESCRIBE SOIL TYPE BY UNIFIED SOIL CLASSIFICATION SYSTEM WITH EMPHASIS ON IN-PLACE OR NATURAL CONDITION.

CONSULTING ENGINEERS / PLANNERS

FOUNDATION ENGINEERING
SOILS INVESTIGATION

PROJECT <u>Helms Shopping Center</u>	BORING NO. <u>15</u>
LOGGED BY <u>Larry J. Johnson</u>	SIZE OF BORING <u>8</u> INCHES
DATE BEGUN <u>2-21-74</u>	GROUND ELEVATION <u>4,396 (Top●)</u>
DATE FINISHED <u>2-21-74</u>	GROUND WATER ELEVATION <u>Not Encountered</u>
TYPE OF BORING <u>AUGER</u> <input checked="" type="checkbox"/> <u>WATER</u>	DATE GROUND WATER MEASURED _____

PLATE 20



SAMPLE No.	L.L.	P.I.	NAT. W.C.
2B	38	18	12.9
4B	35	9	18.6
6B	36	12	19.7
4C	--	N.P.	14.8
1C	--	--	5.7

GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

GRADATION CURVES

T E S T R E S U L T SMechanical Analysis

<u>Sample No.</u>	<u>1C</u>	<u>2B</u>	<u>4B</u>	<u>4C</u>	<u>5B</u>	<u>6B</u>	<u>6C</u>	<u>10A</u>	<u>10B</u>
<u>U.S. Standard Sieve Size</u>	<u>Percent By Weight Passing</u>								
1/2 inch	98								
3/8 inch	96								
No. 4	94		100	100					
No. 10	91	100	99	99	100	100	100	100	100
No. 40	57	93	96	93	97	97	98	92	97
No. 100	21	84	76	53	85	80	74	67	84
No. 200	9	65	56	33	70	53	36	49	66

Atterberg Limits

Liquid Limit	--	37.5	35.0	--	37.8	35.6	--	--	33.5
Plastic Index	N.P.	17.6	8.7	N.P.	13.6	11.6	N.P.	N.P.	11.7

In-Place Density and Moisture

<u>Sample No.</u>	<u>1C</u>	<u>2B</u>	<u>4B</u>	<u>4C</u>	<u>6B</u>	<u>10B</u>
<u>Depth - Feet</u>	8.0-9.5	3.0-4.5	0.0-1.5	8.0-9.5	3.0-4.5	3.0-4.5
<u>Dry Density</u>	102	98	95	99	98	104
<u>Moisture Content</u>	5.7	12.9	18.6	14.8	19.7	14.6



JOE LOMBARDO, Governor

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

District II
310 Galletti Way
Sparks, Nevada 89431
775-888-3040

TRACY LARKIN-THOMASON P.E., Director

July 29, 2024

City of Sparks
Attn: Robert Schricker
431 Prater Way
Sparks, NV 89431

RE: **APPROVED Permit**
Permit 218129-24

Dear Permittee:

The Nevada Department of Transportation, District 2 Permit Office has accepted your application and has **APPROVED** your permit for the following location and work.

Permit Application Location:

- On SR 659 (E. McCarran Blvd and Prater Way intersection).

Permit Application Work:

- HES "O1" 194+70 38' Lt. (WA 16.35/16.35) to HES "O1" 194+58 36' Rt. (WA 16.35/16.35)
- Abandon existing 18" sanitary sewer line and install new 18" sanitary sewer line by trenching, place dense grade and 1" mill overlay.

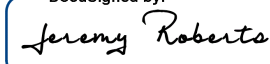
As the PERMITTEE it is your responsibility to know and understand the Standard and Supplemental Terms and Conditions associated with this permit. It is the PERMITTEE's responsibility to obtain any additional permits and/or approvals from the other agencies as may be required by Federal law, State law, local or tribal ordinances.

- All work authorized under this permit shall be completed within **ONE YEAR** from the date of this letter, **July 29, 2024**.
- The District 2 Permit Inspector for this permit is: Shawn Fitzpatrick sfitzpatrick@dot.nv.gov, 775-834-8330, option2.
- This approved permit package, shall be available at all times during construction. All PERMITTEE contractors and subcontractors connected with this permit shall have a complete copy of this permit package on the work site at all times. The permit activity may be ordered to cease by the District 2 Permit Inspector if a copy of the complete permit package is not onsite.
- PERMITTEE shall contact the District 2 Permit Inspector to provide a five (5) working day notice prior to beginning any work on this permit.

- PERMITTEE shall provide Site Specific Traffic Control (SSTC) prior to beginning work.
- For emergencies 24 hours a day, contact the District 2 Permits Emergency phone number at (775) 834-8344.
- Should NDOT ITS Fiber Optic Line be encountered during work, immediately contact the NDOT ITS TOTS 24/7 phone number at 1-(877)-638-6777.
- All formal requests shall be processed through the District 2 Permit Office, submit all requests to the D2permits@dot.nv.gov. This includes, but not limited to:
 - Letters of Request (modify work hours, holiday work requests)
 - Construction time extensions
 - Amendments

If you have any questions or need additional information, contact the District 2 Permit Office, option 1 at (775) 834-8330 or D2Permits@dot.nv.gov.

Sincerely,

DocuSigned by:

CAEEC42D04334DE...

Jeremy Roberts
District 2 Permits Supervisor

JR/km

cc: Lonnie Johnson ljohnson@jub.com
Shawn Fitzpatrick sfitzpatrick@dot.nv.gov
District File



Joe Lombardo
Governor

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

Tracy Larkin - Thomason, P.E., Director

District II
310 Galletti Way
Sparks, Nevada 89431
May 17, 2024

City of Sparks
Attn: Robert Schricker
431 Prater Way
Sparks, NV 89431

Permit No. 218129-24 (SR 659 WA 16.35) - Revision Request

Dear Applicant:

This letter is in reference to the Nevada Department of Transportation (NDOT) permit application submitted on March 5, 2024, for work on SR 659 to abandon existing 18" sanitary sewer line and install new 18" sanitary sewer line by trenching, place dense grade and 1" mill overlay. Please note, the application is on hold pending the following required revisions from the District II Permit Office.

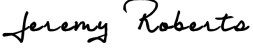
District Engineering Services Comments:

- 1) The deviation for casing is approved. The deviation for marathon weekends is approved but the hours shall start at 8 pm Friday thru 5 am Monday.
- 2) Please provide correct geotech report, the one provided is for North McCarran and East prater. Please clarify type of existing sewer pipe, plans show AC, deviation letter states RCP.

Please provide a response letter addressing each comment and complete sets of revised plans with the resubmission. When ready to provide required documents, please contact the District Permit Office at (775) 834-8330 to receive a link to electronically submit your document(s). If you have any questions, please email us at D2Permits@dot.nv.gov.

If revisions are not received within **sixty (60) days** of the receipt of this letter the permit application will be cancelled; therefore, please contact our office if additional time is needed. Thank you for your prompt attention to this issue.

Sincerely,

DocuSigned by:

CAEEC42D04334DE...

Jeremy Roberts
NDOT District II Permits Supervisor

JR/smg

cc: Lonnie Johnson ljohnson@jub.com
District File

Forms

(to be used following award of bid)

- 1) Contract Form**
- 2) Performance Bond**
- 3) Payment Bond**



TITLE
BID # BIDNUMBER
PWP# PWPNUMBER

THIS CONTRACT made and entered into on this **DAY day of MONTH, YEAR** by and between the City of Sparks, Nevada, a municipal corporation, existing under and by virtue of the laws of the State of Nevada, hereinafter called "City", and **CONTRACTORNAME**, a qualified Contractor in the class of work required, hereinafter called "Contractor".

W I T N E S E T H

WHEREAS, the City has awarded a contract to Contractor for providing material and/or performing the work hereinafter mentioned in accordance with the proposal of said Contractor;

WHEREAS, the Contractor will provide the material and/or perform the work for the compensation stated in said proposal, an amount which has been arrived at between the parties;

WHEREAS, each party is willing to and does assume joint liability for the contents of this Contract, and each party accordingly agrees that it shall not be construed against any party as a drafting party;

NOW, THEREFORE, IT IS AGREED as follows:

1. Scope of Work:

The scope of work for this contract is generally defined as **TITLE**. The City's Contract Documents and Contractor's Entire Proposal are on file with the City of Sparks. All terms, conditions and requirements contained within these Documents, including any and all bid documents, addenda and specifications issued by the City, are hereby incorporated by reference into this Contract.

The Contractor shall perform within the time stipulated, the Contract as herein defined and shall provide and furnish any and all of the labor, materials, methods or processes, equipment implements, tools, machinery and equipment, and all utility, transportation and other services required to construct, install and put in complete order for use in a good and workmanlike manner all of the work covered by the Contract in connection with strict accordance with the plans and specifications therein, which were approved by said City and are on file with the City, including any and all addenda issued by the City, and with the other contract documents hereinafter enumerated.

2. Payment for Project Services

As full consideration for the Services to be performed by Contractor, City agrees to pay Contractor as set forth in accordance with the bid and not to exceed fee of **\$AMOUNT** for the project.

A monthly progress payment in the amount of ninety-five percent (95%) of the value of the work completed may be made every thirty (30) days upon application by the Contractor and certification by the Project Manager that such work has been completed.

Partial payments will be made once each month as the work satisfactorily progresses and after acceptance



by the authorized City representative. The progress estimates shall be based upon materials in place, or on the job site and invoiced, and labor expended thereon. From the total of the amount ascertained will be deducted an amount equivalent to five percent (5%) of the whole, which five percent (5%) will be retained by the City until after completion of the entire Contract in an acceptable manner. Any time after fifty percent (50%) of the value of the work has been completed, the City will make any of the remaining partial payments in full.

No such estimates or payments shall be required to be made, when, in the judgment of the City Project Manager, the work is not proceeding in accordance with the provision of the Contract, or when in his judgment the total value of the work done since last estimate amounts to less than Five Hundred Dollars (\$500.00).

The cost of materials conforming to the plans and specifications (materials being those which are required to be contained and incorporated in a finished contract bid item) delivered to the project and not at the time incorporated in the work, may also be included in the estimate for payment. No such estimate or payment shall be construed to be an acceptance of any defective work or improper material. The Contractor shall be responsible for, and shall not remove from the project any material that has been included in the estimate for payment.

Final payment shall be made upon the Project Manager certifying that the Contractor has satisfactorily completed the work in conformity with the Contract Documents.

3. Time for Completion:

The Contractor shall deliver the material and/or services called for in the specifications/proposal and within the delivery time specified and in accordance with the terms of the contract. Work shall be completed within [REDACTED] days from the Notice to Proceed issued by the City of Sparks Purchasing Division. The Contractor shall not alter or vary any terms or conditions contained or incorporated herein, including but not limited to, the quantity, price, delivery date or date designated as After Receipt of Order (ARO) or date for commencement or completion of services as mutually agreed upon, unless such alteration or variation is consented to in writing by a duly authorized representative of the City.

The City reserves the right to cancel resultant Contract upon ten days written notice in the event the type and quality of the product or work performance is unsatisfactory or in default, subject to Contractor's right to cure as outlined in termination clause.

This is a non-exclusive Contract and the City reserves the right to acquire the material and/or services at its discretion, from other sources during the term of this Contract.

4. No Unlawful Discrimination:

In connection with the performance of work under this contract, the contractor agrees not to discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation, gender identity or expression, 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 contractor further agrees to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

Any violation of these provisions by Contractor shall constitute a material breach of contract. In all cases where persons are employed in the construction of public works, preference must be given when the qualifications of the applicants are equal:

- A) First: To honorably discharged soldiers, sailors and marines of the United States who are citizens of the State of Nevada.
- B) Second: To other citizens of the State of Nevada

If the provisions of this section are not complied with by the contractor engaged on the public work, the contract is void, and any failure or refusal to comply with any of the provisions of this section renders any such contract void and subject to the exceptions contained in this section, no money may be paid out of the State Treasury or out of the treasury of any political subdivision of the State to any person employed on any work mentioned in this section unless there has been compliance with the provisions of this section. Any contractor engaged on a public work or any other person who violates any of the provisions of this section is guilty of a misdemeanor. The penalties provided for in this section do not apply where violations thereof are due to misrepresentations made by the employee or employees.

5. No Illegal Harassment:

Violation of the City's harassment policy, which is incorporated by reference and available from the Human Resource Division, by the Contractor, its officers, employees, agents, vendors, consultants, subcontractors and anyone from whom it is legally liable, while performing or failing to perform Contractor's duties under this Contract shall be considered a material breach of contract.

6. Lawful Performance:

Vendor shall abide by all Federal, State and Local Laws, Ordinances, Regulations, and Statutes as may be related to the performance of duties under this agreement. In addition, all applicable permits and licenses required shall be obtained by the vendor, at vendor's sole expense.

7. Preferences (This Section ☐ IS ☐ IS NOT Applicable to this contract):

To the extent Contractor has sought and qualified for a bidding preference and this project has a value of over \$250,000 pursuant to Nevada Revised Statutes Chapter 338, Contractor acknowledges and agrees that the following requirements will be adhered to, documented and attained for the duration of the Project:

- 1. At least 50 percent of the workers employed on the Project (including subcontractors) hold a valid driver's license or identification card issued by the Nevada Department of Motor Vehicles;
- 2. All vehicles used primarily for the public work will be (a) registered and (where applicable) partially apportioned to Nevada; or (b) registered in Nevada; and
- 3. The Contractor shall maintain and make available for inspection within Nevada all payroll records related to the Project.

Contractor recognizes and accepts that failure to comply with any requirements herein shall be a



material breach of the contract and entitle the City of Sparks to liquidated damages in the amount set by statute. In addition, the Contractor recognizes and accepts that failure to comply with any requirements herein may lose its certification for a preference in bidding and/or its ability to bid on any contracts for public works pursuant to NRS Chapter 338.

To the extent Contractor has sought and qualified for a bidding preference and this project has a value of over \$250,000 pursuant to Nevada Revised Statutes Chapter 338, each contract between the contractor, applicant or design-build team and a subcontractor must provide for the apportionment of liquidated damages assessed pursuant to this section if a person other than the Contractor was responsible for the breach of a contract for a public work caused by a failure to comply with a requirement of Items 1-5 within this section. The apportionment of liquidated damages must be in proportion to the responsibility of each party for the breach.

8. Prevailing Wages:

The Contractor and subcontractors shall be bound by and comply with all federal, state and local laws with regard to minimum wages, overtime work, hiring and discrimination, including Chapter 338 of the NRS, which is entitled, "Public Works Projects."

The Contractor shall ensure that all employees on the work site are paid in accordance with the CURRENT PREVAILING WAGE RATES AS APPROVED BY THE STATE LABOR COMMISSIONER, whenever the actual value of the Contract totals One Hundred Thousand Dollars (\$100,000) or more, or when required by the Supplementary Conditions. If a Change Order causes a Contract to exceed One Hundred Thousand Dollars (\$100,000), the State Labor Commissioner may audit the entire Contract period.

Questions involving the Prevailing Wage Rates for the City of Sparks should be referred to the Labor Commissioner, State of Nevada, at (775) 687-4850.

When federal money is associated with the project making the Contract subject to both state and federal wage rates, the Contractor shall not pay less than the higher rate when the two rates differ for similar kinds of labor.

- A. Posting of Minimum Wage Rates - In accordance with NRS, Chapter 338, Section 338.020, the Contractor shall post the hourly and daily rate of wages to be paid to each of the classes of mechanics and workers on the site of Work of this Contract in a place generally visible to the workers.
- B. Pursuant to NRS 338.060 and 338.070, the Contractor hereby agrees to forfeit, as a penalty to the City of Sparks, not less than Twenty Dollars (\$20) nor more than Fifty Dollars (\$50) for each calendar day or portion thereof that each worker employed on the Contract is paid less than the designated rate for any work done under the Contract, by the Contractor or any subcontractor under him, or is not reported to the City of Sparks as required by NRS 338.070.
- C. The contractor and each subcontractor shall keep or cause to be kept an accurate record showing, for each worker employed by the contractor or subcontractor:
 - (1) The name of the worker;



-
- (2) The occupation of the worker;
 - (3) If the worker has a driver's license or identification card, an indication of the state or other jurisdiction that issued the license or card; and
 - (4) The actual per diem, wages and benefits paid to the worker.

In addition, the contractor and each subcontractor shall keep or cause to be kept an accurate record showing, for each worker employed by the contractor or subcontractor who has a driver's license or identification card:

- (1) The name of the worker;
- (2) The driver's license number or identification card number of the worker; and
- (3) The state or other jurisdiction that issued the license or card.

D. The records in Section C above must be open at all reasonable hours to the inspection of the City of Sparks, and its officers and agents. A copy of the each record for each calendar Month for the General Contractor and all Sub-Contractors must be submitted to the City of Sparks no later than 15 days after the end of each month for the previous months' wages.

9. Apprenticeship Utilization Act:

Bidder acknowledges that the Nevada Legislature has enacted state laws requiring contractors engaged in vertical or horizontal construction who employ workers on one or more public works during a calendar year to use varying levels of apprentices on such public works. *See* NRS 338.01165; SB 82 (2023). Contractor acknowledges that Senate Bill 82 (2023) places compliance and reporting requirements on contractors and subcontractors engaged in public works project, and requires contractors and subcontractors engaged in public works projects to meet annual apprentice use thresholds set by state law, including obligations to provide the Nevada Labor Commissioner with supporting documentation when requested, and an obligation to provide an annual report to the Nevada Labor Commissioner documenting its compliance with Nevada apprenticeship requirements. Contractor acknowledges and certifies that it will comply with NRS 338.01165 and SB 82 (2023), as each may be amended in the future.

10. Acceptance by the City:

It is expressly understood and agreed that all materials provided and/or work done by the Contractor shall be subject to inspection and acceptance by the City at its discretion, and that any progress inspections and approval by the City of any item or work shall not forfeit the right of the City to require the correction of faulty workmanship or material at any time during the course of the work, although previously approved by oversight. Nothing herein contained shall relieve the Contractor of the responsibility for proper construction and maintenance of the work, materials and equipment required under the terms of this Contract until all work has been completed and accepted by the City.

11. Waiver:

No waiver of any term, provision or condition of this Contract, whether by conduct or otherwise, in any one or more instances, shall be deemed to be nor shall it be construed as a further or continuing waiver of any such term, provision or condition of this Contract. No waiver shall be effective unless it is in writing and signed by the party making it.

12. Notices:



All notices required to be given in writing by this Contract shall be deemed to be received (i) upon delivery if personally delivered, or (ii) when receipt is signed for if mailed by certified or registered mail, postage prepaid, or by express delivery service or courier, when addressed as follows (or sent to such other address as a Party may specify in a notice to the others):

PURCHASING MANAGER
CITY OF SPARKS
431 PRATER WAY
PO BOX 857
SPARKS, NV 89432-0857

CONTRACTOR:
CONTACT
CONTRACTORNAME
ADDRESS
CITY, STATE ZIP
e-mail:

13. Arbitration:

Any and all disputes, controversies or claims arising under or in connection with this Contract, including without limitation, fraud in the inducement of this Contract, or the general validity or enforceability of this Contract, shall be governed by the laws of the State of Nevada without giving effect to conflicts of law principles, may be submitted to binding arbitration before one arbitrator, and shall be conducted in accordance with the Commercial Arbitration Rules of the American Arbitration Association in a private manner in Washoe County, Nevada. This award shall be final and judgment may be entered upon it in any court having jurisdiction thereof. In reaching this final award, the arbitrator shall have no authority to change or modify any provision of this Contract. All other expenses of arbitration shall be borne equally by the parties. All fees, including legal fees, shall be borne by the party who incurred them. All costs of enforcement shall be borne by the losing party. Each party shall have the right to discovery in accordance with the Nevada Rules of Civil Procedure.

14. Jurisdiction and Venue:

In the event the arbitration award is challenged, any action or proceeding seeking to do so must be brought in the courts of the State of Nevada, County of Washoe, or if the party can acquire subject-matter jurisdiction, in the United States District Court for the District of Nevada in the City of Reno. Each of the parties consents to the personal jurisdiction of such courts (and of the appropriate appellate courts) in any such action or proceeding and waives any objection to venue laid therein. Process in any action or proceeding referred to in the preceding sentence may be served on either party by sending it certified mail to the respective addresses designated for notice.

15. Indemnification:

To the fullest extent permitted by law, upon award, Contractor shall hold harmless, indemnify, defend and protect City, its affiliates, officers, agents, employees, volunteers, successors and assigns ("Indemnified Parties"), and each of them from and against any and all claims, demands, causes of action, damages, costs, expenses, actual attorney's fees, losses or liabilities, in law or in equity, of every kind and nature whatsoever ("Claims") arising out of or related to any act or omission of Contractor, its employees, agents, representatives, or Subcontractors in any way related to the performance of work under this Agreement by Contractor, or to work performed by others under the direction or supervision of Contractor, including but not limited to:



1. Personal injury, including but not limited to bodily injury, emotional injury, sickness or disease, or death to persons;
2. Damage to property of anyone, including loss of use thereof;
3. Penalties from violation of any law or regulation caused by Contractor's action or inaction;
4. Failure of Contractor to comply with the Insurance requirements established under this Agreement;
5. Any violation by Contractor of any law or regulation in any way related to the occupational safety and health of employees.

In determining the nature of the claim against City, the incident underlying the claim shall determine the nature of the claim, notwithstanding the form of the allegations against City.

If City's personnel are involved in defending such actions, Contractor shall reimburse City for the time and costs spent by such personnel at the rate charged City for such services by private professionals.

In cases of professional service agreements, requiring professional liability coverage:

If the insurer by which a Consultant is insured against professional liability does not so defend the City and applicable agents and/or staff, and the Consultant is adjudicated to be liable by a trier of fact, the City shall be entitled to reasonable attorney's fees and costs to be paid to the City by the Consultant in an amount which is proportionate to the liability of the of the Consultant.

Nothing in this contract shall be interpreted to waive nor does the City, by entering into this contract, waive any of the provisions found in Chapter 41 of the Nevada Revised Statutes.

16. Licenses and Permits:

The Contractor shall procure at his own expense all necessary licenses and permits and shall adhere to all the laws, regulations and ordinances applicable to the performance of this Contract.

All Contractors, Sub-Contractors and Suppliers doing business within the City of Sparks are required to obtain a current business license from the City of Sparks prior to commencement of this contract. Per Sparks Municipal Code Section 5.08.020A: "It is unlawful for any person to transact business in the City without first having obtained a license from the City to do so and without complying with all applicable provisions of this title and paying the fee therefore."

17. Insurance:

BIDDERS' ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW. IT IS HIGHLY RECOMMENDED THAT BIDDERS CONFER WITH THEIR RESPECTIVE INSURANCE CARRIERS OR BROKERS TO DETERMINE IN ADVANCE OF BID SUBMISSION THE AVAILABILITY OF INSURANCE CERTIFICATES AND ENDORSEMENTS AS PRESCRIBED AND PROVIDED HEREIN. IF THE APPARENT LOW BIDDER FAILS TO COMPLY STRICTLY WITH THE INSURANCE REQUIREMENTS, THAT BIDDER MAY BE DISQUALIFIED FROM AWARD OF THE CONTRACT.



The City may, unless otherwise required by law, waive or reduce the insurance requirements itemized here, at the discretion of the city's Contracts and Risk Manager.

Should work be required on City premises or within the public right-of-way, upon award of the contract, the bidder shall provide proof of insurance for the types of coverage, limits of insurance and other terms specified herein, prior to initiation of any services under City, Bid, Proposal or Contract. Coverage shall be from a company authorized to transact business in the State of Nevada and the City of Sparks and shall meet the following minimum specifications:

Contractor shall at its own expense carry and maintain at all times the following insurance coverage and limits of insurance no less than the following or the amount customarily carried by Contractor or any of its subcontractors, whichever is greater. Contractor shall also cause each subcontractor employed by Contractor to purchase and maintain insurance of the type specified herein. All insurers must have AM Best rating not less than A-VII, and be acceptable to the City. Contractor shall furnish copies of certificates of insurance evidencing coverage for itself and for each subcontractor. Failure to maintain the required insurance may result in termination of this contract at City's option. If Contractor fails to maintain the insurance as set forth herein, City shall have the right, but not the obligation, to purchase said insurance at Contractor's expense.

Contractor shall provide proof of insurance for the lines of coverage, limits of insurance and other terms specified below prior to initiation of any services. Coverage shall be from a company authorized to transact business in the State of Nevada and the City of Sparks. Contractor and any of its subcontractors shall carry and maintain coverage and limits no less than the following or the amount customarily carried by Contractor or any of its subcontractors, whichever is greater.

Applicable to this Contract	Insurance Type	Minimum Limit	Insurance Certificate	Additional Insured	Waiver of Subrogation
Yes	General Liability/Umbrella (Excess) Liability	\$2,000,000	✓	✓	✓
Yes	Automobile Liability	\$1,000,000	✓	✓	
Yes	Workers' Compensation	Statutory	✓	N/A	✓
Yes	Employer's Liability	\$1,000,000	✓	N/A	
No	Professional Liability	\$1,000,000	✓	N/A	N/A
No	Pollution Legal Liability	\$1,000,000	✓	N/A	N/A

Commercial General Liability

Contractor shall carry and maintain Commercial General Liability (CGL) and, if necessary to meet required limits of insurance, commercial umbrella/excess liability insurance with a total limit of not less than the limits specified herein.



For contracts that are for the construction or improvement of public facilities, the Contractor shall obtain and maintain products and completed operations liability coverage through the statute of repose after completion of the project. Continuing commercial umbrella coverage, if any, shall include liability coverage for damage to the insured's completed work equivalent to that provided under ISO form CG 00 01.

There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from pollution, explosion, collapse, underground property damage, or damage to the named insured's work unless Subcontractor carries and maintains separate policies providing such coverage and provides Contractor evidence of insurance confirming the coverage.

Minimum Limits of Insurance

\$2,000,000 Each Occurrence Limit for bodily injury and property damage

\$2,000,000 General Aggregate Limit

\$2,000,000 Products and Completed Operations Aggregate Limit

\$10,000 Medical Expense Limit

If Commercial General Liability Insurance or other form with a general aggregate limit is used, it shall be revised to apply separately to this PROJECT or LOCATION.

Coverage Form

Coverage shall be at least as broad as the unmodified Insurance Services Office (ISO) Commercial General Liability (CGL) "Occurrence" form CG 00 01 04/13 or substitute form providing equivalent coverage and shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

Additional Insured

City, its officers, agents, employees, and volunteers are to be included as insureds using the applicable ISO additional insured endorsement(s) or substitute forms providing equivalent coverage, in respects to damages and defense arising from: activities performed by or on behalf of Contractor, including the insured's general supervision of Contractor; products and completed operations of Contractor; premises owned, occupied, or used by Contractor. The coverage shall contain no special limitations on the scope of protection afforded to City, its officers, employees, or volunteers. Additional insured status for City shall apply until the expiration of time within which a claimant can bring suit per applicable state law.

Primary and Non-Contributory

Contractor's insurance coverage shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to City, its officers, agents, employees, and volunteers. There shall be no endorsement or modification of the CGL to make it excess over other available insurance; alternatively, if the CGL states that it is excess or pro rata, the policy shall be endorsed to be primary with respect to the additional insured. Any insurance or self-insurance maintained by City, its officers, employees, or volunteers shall be excess of Contractor's insurance and shall not contribute with it in any way.

Waiver of Subrogation



Contractor waives all rights against City and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained pursuant to this agreement. Insurer shall endorse CGL policy as required to waive subrogation against the City with respect to any loss paid under the policy.

Endorsements

Policy forms or endorsements are required confirming coverage for all required additional insureds. The forms or endorsements for CGL shall be at least as broad as the unmodified ISO additional insured endorsement CGO 20 10 07/04 and CG 20 37 07/04 or substitute forms providing additional insured coverage for products and completed operations.

A waiver of subrogation in favor of City shall be endorsed to the policy using an unmodified Waiver of Transfer of Rights of Recovery of Others to Us ISO CG 24 04 05 09, or a substitute form providing equivalent coverage.

Electronic Data Liability

If any underground work will be performed, Contractor shall maintain electronic data liability insurance applicable to the Project and insuring against liability arising out of the loss of, loss of use of, damage to, corruption of, inability to access, or inability to manipulate electronic data. This coverage shall be maintained with a limit of liability of not less than \$1,000,000 and provide coverage at least as broad as electronic data liability coverage form CG 04 37 (or substitute form providing equivalent coverage).

Railroad Protective Liability

For any construction or demolition work within fifty (50) feet of a railroad, Contractor shall maintain Railroad Protective Liability insurance on behalf of and in the name of the railroad, as named insured, with a limit of \$6,000,000 per occurrence or higher limit if required by the railroad. Contractor shall also ensure that any exclusions pertaining to the indemnification of a railroad are removed from its CGL policy or that ISO form CG 24 17 (Contractual Liability-Railroads Endorsements) is included in the coverage.

Business Automobile Liability

Minimum Limits of Insurance

\$1,000,000 Combined Single Limit per accident for bodily injury and property damage or the limit customarily carried by Contractor, whichever is greater. No aggregate limit may apply. Coverage may be combined with Excess/Umbrella Liability coverage to meet the required limit.

Coverage Form

Coverage shall be at least as broad as the unmodified Insurance Services Office (ISO) Business Automobile Coverage form CA 00 01 10/13, CA 00 25 10/13, CA 00 20 10/13 or substitute form providing equivalent coverage. Such insurance shall cover liability arising out of any auto (including owned, hired, and non-owned autos).

Pollution liability coverage at least as broad as that provided under the ISO pollution liability—broadened coverage for covered autos endorsement (CA 99 48) shall be provided, and the Motor Carrier Act endorsement (MCS 90) shall be attached for all contracts involving transportation of “hazardous



material” as this term is defined by applicable law, including, but not limited to, waste, asbestos, fungi, bacteria and mold.

Additional Insured

City, its officers, agents, employees, and volunteers are to be included as insureds with respect to damages and defense arising from the ownership, maintenance or use of automobiles owned, leased, hired, or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to City, its officers, employees, or volunteers. Additional insured status for City shall apply until the expiration of time within which a claimant can bring suit per applicable state law.

Endorsements

A policy endorsement is required listing all required additional insureds. The endorsement for Business Automobile Liability shall be at least as broad as the unmodified ISO CA 20 48 10/13 or a substitute form confirming City’s insured status for Liability Coverage under the Who Is An Insured Provision contained in Section II of the coverage form ISO CA 00 01 10/13.

Waiver of Subrogation.

Contractor waives all rights against City, its officers, agents, employees, and volunteers for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained pursuant to this agreement. Contractor’s insurer shall endorse policy to waive subrogation against City with respect to any loss paid under the policy.

Workers’ Compensation and Employer’s Liability

Contractor shall carry and maintain workers’ compensation and employer’s liability insurance meeting the statutory requirements of the State of Nevada, including but not limited to NRS 616B.627 and NRS 617.210 or provide proof that compliance with the provisions of Nevada Revised Statutes Chapters 616A-D and all other related chapters is not required. It is understood and agreed that there shall be no coverage provided for Contractor or any Subcontractor of the Contractor by the City. Contractor agrees, as a precondition to the performance of any work under this Agreement and as a precondition to any obligation of the City to make any payment under this Agreement to provide City with a certificate issued by an insurer in accordance with NRS 616B.627 and with a certificate of an insurer showing coverage pursuant to NRS 617.210.

It is further understood and agreed by and between City and Contractor that Contractor shall procure, pay for and maintain the above-mentioned coverage at Contractor's sole cost and expense.

Should Contractor be self-funded for workers’ compensation and employer’s liability insurance, Contractor shall so notify City in writing prior to the signing of this Contract. City reserves the right to approve said retentions, and may request additional documentation, financial or otherwise, for review prior to the signing of this Contract.

Upon completion of the project, Contractor shall, if requested by City, provide a Final Certificate for itself and each Subcontractor showing that Contractor and each Subcontractor had maintained the required Workers Compensation and Employer’s Liability by paying all premiums due throughout the entire course of the project.



Nevada law allows the following to reject workers' compensation coverage if they do not use employees or subcontractors in the performance of work under the contract:

- Sole proprietors (NRS 616B.627 and NRS 617.210)
- Unpaid officers of quasi-public, private or nonprofit corporations (NRS 616B.624 and NRS 617.207)
- Unpaid managers of limited liability companies (NRS 616B.624 and NRS 617.207)
- An officer or manager of a corporation or limited liability company who owns the corporation or company (NRS 616B.624 and NRS 617.207)

If a contractor has rejected workers' compensation coverage under applicable Nevada law, the contractor must indicate the basis for the rejection of coverage and complete, sign and have notarized an Affidavit of Rejection of Coverage. The Affidavit must be completed, signed and notarized prior to performance of any work.

Minimum Limits of Insurance

Workers' Compensation:	Statutory Limits
Employer's Liability:	\$1,000,000 Bodily Injury by Accident – Each Accident
	\$1,000,000 Bodily Injury by Disease – Each Employee
	\$1,000,000 Bodily Injury by Disease – Policy Limit

Coverage Form

Coverage shall be at least as broad as the unmodified National Council on Compensation Insurance (NCCI) Workers Compensation and Employer's Liability coverage form WC 00 00 07/11 or substitute form providing equivalent coverage.

OTHER INSURANCE COVERAGES (IF APPLICABLE)

Professional Liability Insurance (if Applicable) \$1,000,000 each claim limits of liability or whatever limit is customarily carried by the Contractor, whichever is greater, for design, design-build or any type of professional services. If coverage is required on a claims-made or claims-made and reported basis, any applicable retroactive or pending & prior litigation dates must precede the effective date of this contract. Continuous coverage shall be maintained, or an extended reporting period shall be obtained for a period of at least three (3) years following completion of the project.

Contractors Pollution Liability Insurance (If Applicable) \$1,000,000 per occurrence and \$2,000,000 aggregate or whatever amount is acceptable to the City for any exposure to "hazardous materials" as this term is defined in applicable law, including but not limited to waste, asbestos, fungi, bacterial or mold.

Coverage shall apply to bodily injury; property damage, including loss of use of damaged property or of property that has not been physically injured; cleanup costs; and defense, including costs and expenses incurred in the investigation, defense, or settlement of claims.

City shall be included as an insured under Contractor's pollution liability insurance.



If coverage is required on a claims-made or claims-made and reported basis, any applicable retroactive or pending & prior litigation dates must precede the effective date of this contract. Continuous coverage shall be maintained, or an extended reporting period shall be obtained for a period of at least three (3) years following completion of the project.

If the scope of services as defined in this contract includes the disposal of any hazardous materials from the job site, Contractor must furnish to City evidence of pollution liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting waste under this contract. Coverage certified to the City under this section must be maintained in minimum amounts of \$1,000,000 per loss, with an annual aggregate of at least \$2,000,000.

Lower tier sub-subcontractors, Truckers, Suppliers: Evidence confirming lower tier subcontractors, truckers and suppliers are maintaining valid insurance prior to beginning work on the project to meet the requirements set forth herein on Subcontractor, including but not limited to all additional insured requirements of Subcontractor.

ALL COVERAGES

Coverage shall not be suspended, voided, canceled, or non-renewed by either CONTRACTOR or by the insurer, reduced in coverage or in limits except after thirty (30) days' prior written notice has been given to CITY except for ten (10) days' notice for nonpayment of premium.

DEDUCTIBLES AND RETENTIONS

Any deductibles or self-insured retentions that exceed \$100,000.00 per occurrence or claim must be declared to and approved by the City's Contracts and Risk Manager and prior to signing this Contract. City is entitled to request and receive additional documentation, financial or otherwise, prior to giving its approval of the deductibles and self-insured retentions. Any changes to the deductibles or self-insured retentions made during the term of this Contract or during the term of any policy must be approved by City's Contracts and Purchasing Manager prior to the change taking effect. Contractor is responsible for any losses within deductibles or self-insured retentions.

OTHER INSURANCE PROVISIONS

Should City and Contractor agree that higher coverage limits are needed warranting a project policy, project coverage shall be purchased and the premium for limits exceeding the above amount may be borne by City. City retains the option to purchase project insurance through Contractor's insurer or its own source.

Any failure to comply with reporting provisions of the policies shall not affect coverage provided to City, its officers, agents, employees, or volunteers.

ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers with a Best's rating of no less than A-VII and acceptable to the City. City, with the approval of the Risk Manager, may accept coverage with carriers having lower Best's ratings upon review of financial information concerning Contractor and insurance carrier. City reserves the right to require that Contractor's insurer be a licensed and admitted insurer in the State of Nevada, or meet any applicable state and federal laws and regulations for non-admitted insurance placement.



VERIFICATION OF COVERAGE

Contractor shall furnish City with certificates of insurance and with original endorsements affecting coverage required by this contract. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

Prior to the start of any Work, Contractor must provide the following documents to City of Sparks, Attention: Purchasing Division, P.O. Box 857, Sparks, NV 89432-0857:

- A. Certificate of Insurance.** Contractor must provide a Certificate of Insurance form to the City of Sparks to evidence the insurance policies and coverage required of Contractor.
- B. Additional Insured Endorsements.** An original Additional Insured Endorsement, signed by an authorized insurance company representative, must be submitted to the City of Sparks, by attachment to the Certificate of Insurance, to evidence the endorsement of the City of Sparks as additional insured.
- C. Policy Cancellation Endorsement.** Except for ten (10) days' notice for non-payment of premium, each insurance policy shall be endorsed to specify that without thirty (30) days prior written notice to the City of Sparks, the policy shall not be suspended, voided, cancelled or non-renewed, and shall provide that notices required by this paragraph shall be sent by certified mailed to the address specified above. A copy of this signed endorsement must be attached to the Certificate of Insurance. If endorsements are not available, Contractor shall be responsible to provide prior written notice to City as soon as practicable upon receipt of any notice of cancellation, non-renewal, reduction in required limits or other material change in the insurance required under this Agreement.
- D. Bonds (as Applicable).** Bonds as required and/or defined in the original bid documents.

All certificates and endorsements are to be addressed to the City of Sparks, Purchasing Division and be received and approved by City before work commences. The City reserves the right to require complete certified copies of all required insurance policies at any time.

SUBCONTRACTORS

Contractor shall include all Subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each Subcontractor. All coverages for Subcontractors shall be subject to all the requirements stated herein.

MISCELLANEOUS CONDITIONS

- 1. Contractor shall be responsible for and remedy all damage or loss to any property, including property of City, caused in whole or in part by Contractor, any Subcontractor, or anyone employed, directed, or supervised by Contractor.
- 2. Nothing herein contained shall be construed as limiting in any way the extent to which Contractor may be held responsible for payment of damages to persons or property resulting from its operations or the operations of any Subcontractors under it, and such coverage and



limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to City in this contract.

3. In addition to any other remedies City may have if Contractor fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, City may, at its sole option:
 - a. Purchase such insurance to cover any risk for which City may be liable through the operations of Contractor under this Agreement and deduct or retain the amount of the premiums for such insurance from any sums due under the Agreement;
 - b. Order Contractor to stop work under this Agreement and/or withhold any payments which become due Contractor here under until Contractor demonstrates compliance with the requirements hereof; or,
 - c. Terminate the Agreement.
4. If Contractor's liability policies do not contain the standard ISO separation of insureds condition, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

18. Liquidated Damages:

If the Product is not delivered/Project is not completed within the time stipulated in the bid, the Contractor shall pay to the City of Sparks as fixed, agreed and liquidated damages for delay and not as a penalty (it being impossible to determine the actual damages occasioned by the delay) **\$AMT** for each day of delay until delivery is completed; the Contractor shall be liable to the City of Sparks for the amount herein. This amount may be deducted from money due or to become due to the Contractor as compensation under this proposal in the event the Contractor fails to meet delivery schedules or product specifications.

19. Material Breach of Contract:

In the event Contractor fails to deliver the product and services as contracted for herein, to the satisfaction of the City of Sparks or otherwise fails to perform any provisions of this Contract, the City, after providing five (5) days written notice and Contractor's failure to cure such breach within the time specified in the notice, may without waiving any other remedy, make good the deficiencies and deduct the actual cost of providing alternative products and/or services from payment due the Contractor. Non-performance after the first notice of non-performance shall be considered a material breach of contract.

20. Force Majeure:

Neither party to the Contract shall be held responsible for delay or default caused by fire, riot, acts of God, and/or war which is beyond that party's reasonable control. City may terminate the Contract upon written notice after determining such delay or default will reasonably prevent successful performance of the Contract.

21. Termination:

The City may terminate the Contract for material breach of contract upon ten (10) days written notice and recover all damages, deducting any amount still due the Contractor from damages owed to the City, or seek other remedy including action against all bonds. The Contractor may terminate the Contract for material breach of contract upon thirty (30) days written notice to the City.



22. Assignment:

All of the terms, conditions and provisions of this Contract, and any amendments thereto, shall inure to the benefit of and be binding upon the parties hereto, and their respective successors and assigns. The Contractor shall not assign this Contract without the written consent of the City which will not be unreasonably withheld.

23. Entire Contract:

This Contract constitutes the entire agreement of the parties and shall supersede all prior offers, negotiations, agreements and contracts whether written or oral. Any modifications to the terms and conditions of this Contract must be in writing and signed by both parties.

24. Severability:

If any part of this Contract is found to be void it will not affect the validity of the remaining terms of this Contract which will remain in full force and effect.

25. Headings:

Paragraph titles or captions contained in this Contract are inserted only as a matter of convenience and for reference only, and in no way define, limit, extend, or describe the scope of this Contract or the intent of any provision herein.

26. Singular Includes the Plural; Gender; Title Reference:

Whenever the singular number is used in this Contract and when required by the context, the same shall include the plural, and the use of any gender, be it masculine, feminine or neuter, shall include all of the genders, and the word "person" or "entity" shall include corporation, firm, partnership, or any other combination or association.

The use of the title "Bidder", "Vendor", "Contractor" or "Consultant" within this contract or associated bid documents shall be deemed interchangeable and shall refer to the person or entity with whom the City of Sparks is contracting for the service or product referenced within this contract.

27. Execution:

The parties agree to execute such additional documents and to take such additional actions as are reasonably necessary or desirable to carry out the purposes hereof. They also agree, acknowledge and represent that all corporate authorizations have been obtained for the execution of this Contract and for the compliance with each and every term hereof. Each undersigned officer, representative or employee represents that he or she has the authority to execute this Contract on behalf of the party for whom he or she is signing.



THIS SPACE INTENTIONALLY LEFT BLANK



IN WITNESS WHEREOF, the City of Sparks has caused this Contract to be executed by its officers thereunto duly authorized and the Consultant has subscribed same, all on the day and year first above written.

(Vendor)

CITY OF SPARKS, NEVADA
A Municipal Corporation

By: _____

By: _____
Ed Lawson, Mayor

(Title)

APPROVED AS TO FORM

ATTEST:

City Attorney

City Clerk

CITY OF SPARKS, NEVADA - BOND OF FAITHFUL PERFORMANCE

Bid #: _____

Bond #: _____

Surety Rating: _____

NV License #: _____

Appt. Agent Countersigning - List below with address

KNOW ALL MEN BY THESE PRESENTS: That WHEREAS, the City of Sparks in the State of Nevada has awarded to **CONTRACTORNAME** hereinafter designated as the "Principal" a contract for Bid # **BIDNUMBER**, PWP # **PWPNUMBER**, for the **TITLE** and

WHEREAS, said Principal is required under the terms of said contract to furnish a bond for the faithful and proper performance of the Contract and the Bonding Company has an "A" or better rating with Moody's or A.M. Best and T-Listed with the U.S. Treasury Department;

NOW, THEREFORE, we the Principal and _____ as Surety, are held and firmly bound unto the City of Sparks in the State of Nevada, in the penal sum of **WRITTENAMOUNT** dollars (**\$AMOUNT**), lawful money of the United States, being not less than one hundred percent (100%) of the estimated contract cost of the work, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if the above bound Principal, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and faithfully perform the covenants, conditions and agreements in the said contract and any alterations made as therein provided on his or their part to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the City of Sparks in the State of Nevada, its officers and agents as therein stipulated, then this obligation shall become null and void; otherwise, it shall be and remain in full force and virtue.

As a condition precedent to the satisfactory completion of the said contract, the above obligation shall hold good for a period of one (1) year after the completion and acceptance of the said work, during which time, if the above bounden principal, his or its heirs, executors, administrators, successors or assigns shall fail to make full, complete and satisfactory repair and replacements or totally protect the said City of Sparks in the State of Nevada from loss or damage made evident during said period of one (1) year from the date of acceptance of said works, and resulting from or caused by defective materials or faulty workmanship in the prosecution of the work done, the obligation in the said sum of **WRITTENAMOUNT** dollars (**\$AMOUNT**), shall remain in full force and virtue; otherwise the above obligation shall be void.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in anyway effect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the contract, to the work or to the specifications.

IN WITNESS WHEREOF, the above bound parties have executed this instrument under their seals this ____ day of _____, 20____, the name and corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Principal

By _____

Surety
By _____

CITY OF SPARKS, NEVADA – Payment Bond – Labor & Materials

Bid #: _____

Bond #: _____

Surety Rating: _____

NV License #: _____

Appt. Agent Countersigning - List below with address

KNOW ALL MEN BY THESE PRESENTS: That WHEREAS, the City of Sparks in the State of Nevada, has awarded to **CONTRACTORNAME** hereinafter designated as the “Principal” a contract for Bid # **BIDNUMBER**, PWP # **PWPNUMBER**, for the **TITLE** and

WHEREAS, said Principal is required under the terms of said contract to furnish a Bond for the faithful and proper performance of the Contract and the Bonding Company has an “A” or better rating with Moody’s or A.M. Best and T-Listed with the U.S. Treasury Department;

NOW, THEREFORE, we, the Principal, and _____ as Surety, are held and firmly bound unto the City of Sparks in the State of Nevada, in the penal sum of **WRITTENAMOUNT** dollars (\$**AMOUNT**), lawful money of the United States, being not less than one hundred percent (100%) of the estimated contract cost of the work for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally firmly by these presents.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH that if the above bounden principal, his or its heirs, executors, administrators, successors, or assigns, shall fail to pay for any materials, provisions, provender or other supplies, implements, or machinery used in, upon, for, or about the performance of the work contracted to be done or for any work or labor thereon of any kind, or for amounts due under the Unemployment Compensation Law with respect to such work or labor as required by the provisions of NRS 612, and provided that the claimant shall have complied with the provisions of said law, the Surety hereon will pay for the same within thirty (30) calendar days an amount not exceeding the sum specified in this bond, then the above obligation shall be null and void; otherwise to remain in full force and account. In case suit is brought upon this bond, the said Surety agrees to pay a reasonable attorney’s fees to be fixed by the Court.

The Bond shall insure to the benefit of any and all persons, companies and corporations entitled to file claims under NRS 339 as to give a right of action to them or their assigns in any suit brought upon this Bond.

IN WITNESS WHEREOF, the above bound parties have executed this instrument under their seals this ____ day of _____, 20____, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Principal

By _____

Surety

By _____