

Steve Sisolak, Governor Bradley Crowell, Director Rebecca L. Palmer, SHPO

Stewart Facility

5500 Snyder Avenue, Carson City, NV 89701

Request for Permission to Undertake Structural or Visual Alterations

In accord with the requirements set forth in existing covenants, <u>Nevada State Public Works Division</u> (name of agency) is requesting written permission to undertake visual or structural alterations as described below:

Building Number and Name: FCA Building #0419, Stewart indian School Cultural Center and Museum

Building's Date of Construction: 1923

Supplementary Information:

Please indicate if you have submitted the following-

- Written description of proposed work (*required; see second page*)
- Photographs of existing conditions (*required*)
- Sketches, plans, or architectural drawings depicting the proposed work
- Sketch or site plan of project location
- Specs of materials to be used
- Historic photographs depicting past condition or design
- Other

Request Submitted by:

Markus McEntee

Print name

Signature

Agency – State Public Works Division Title – Project Manager Email address – mjmcentee@admin.nv.gov Phone number – 775-230-9807

Date of Request: 3/21/2022

Please allow up to 14 business days for this form to be processed. Proposed work must not begin until this form has been reviewed and approved by both the State Historic Preservation Office and the Nevada Indian Commission. In some cases, coordination with State Lands is also necessary. Per NRS 321.003, a state agency must also submit a Certification Request to the Nevada Division of State Lands before constructing a building or making other permanent improvements to state Stewart Indian School Complex Request for Permission to Undertake Structural or Visual Alterations

lands. This includes ground disturbance for site work and utilities. If your project requires a State Lands Certification, you will find the instructions on the Division of State Lands website under "Forms."

http://www.lands.nv.gov/

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To expedite your project, the SHPO recommends coordinating with SHPO and State Lands concurrently.

Please submit request form and supplementary materials to the State Historic Preservation Office, 901 S. Stewart St., Ste. 5004, Carson City, NV 89701-5248 or by email to rlpalmer@shpo.nv.gov.

REQUEST APPROVED BY: Rebecca Lynn Palmer Date: 2022.05.04 08:53:26 -07'00'			
Print and sign name	Stacev M	ontoot Date	
Nevada Indian Commission -	Smonford Print and sign name	6/20/22 Date	
* Nevada Division of State L	ands - Elkey Stable { Print and sign name	Der 513)22 Date	
* (If required)			

Description of Proposed Work:

Please provide a thorough written description of the proposed work, including-

- Location on building
- Approximate size of area affected
- Existing conditions
- Materials to be used
- Proposed methods (must follow the <u>Secretary of the Interior's Standards</u>)

(Use as many pages as needed)

The primary scope of this project is to perform maintenance on the existing roads within the Stewart Campus which entails patching, crack seal, slurry and restriping. However, the State has an interest in the installation of Electric Vehicle Charging Stations, and the Stewart Campus has

been selected as a candidate for two charging pedestals. We have secured funds from the Governor's Office of Energy, and are working diligently to secure rebate funds from NV Energy for this installation. This program has been included in the 21-S05 Statewide Paving Program with IFC approval. These pedestals will appear on charging station maps which will attract visitors with electric vehicles to the site.

These pedestals will be installed near the Cultural Center and Museum along Jacobsen way and will connect to the building electrical supply via underground conduit. The installation will required trenching and relandscaping through the lawn and minor replacement of sidewalk along Jacobsen.

State Public Works has been collaborating with Silver State Industries to come up with a wrap for these pedestals that will tone down the look of them, and match the landscape and structures at the facility. A proof has been provided along with the proposed drawings for this project.



Department of Conservation & Natural Resources

Steve Sisolak, Governor Bradley Crowell, Director Charles C. Donohue, Administrator

CERTIFICATION

C2022-16

 DATE REQUEST RECEIVED:
 March 21st, 2022

 DATE CONSTRUCTION TO BEGIN:
 June 1st, 2022

 AGENCY:
 Nevada State Public Works Division

RE: Rehab of road surfaces and the installation of underground infrastructure: Carson City. The scope of work is the maintenance of the campus access road pavements. As well as the installation of the underground infrastructure for the future installation of two Electric Vehicle charging stations.

The proposed construction is located in Section 32, Township 15 North, Range 20 East, Mount Diablo Meridian, Stewart Indian School, Carson City, State of Nevada.

According to the findings, records, maps provided, and other information made available to the Division of State Lands, it is hereby **CERTIFIED** that the portion of the proposed project area depicted in Orange on the attached Exhibit "A" **IS** located within the boundaries of lands managed by the Division of State Lands (NDSL), administered by Buildings and Grounds. However, there is a portion of the requested project area that falls outside of state managed lands and **CANNOT BE CERTIFIED**. This portion occurs on the neighboring parcel APN 009-241-18. State Public Works Division will need to obtain written or email permission from the neighboring owner in order to perform work on their property.

In addition, the project site has four known easements. The first is granted to Carson City for a storm sewer, while the second is granted to Sierra Pacific Power Company for an electrical line. The final two are granted to Carson City for water lines. Furthermore, there are four previous certifications granted during and after 2021 whose project parameters fall within the current proposed project area and are depicted in a white outline. Please refer to Exhibit "A".

Please be advised that if any buried features or human remains are found you are required to call **The Nevada State Historic Preservation Office** immediately (Rebecca Palmer, Review and Compliance, Carson City, (775) 684-3443). If any Federal Agency or Federal funding is involved in this project, that agency is required to contact the Nevada State Historic Preservation Office prior to the beginning date of the project.

Pursuant to NRS Chapter 455, the Nevada Public Utilities Commission advises all excavators to call 811, a free national service, at least two business days before excavation in order to locate subsurface installations.

DATE: 5322

Charles Donohue Administrator & State Land Registrar

DRAWINGS REVIEWED BY:

5/3/22

Kevin Wichman GIS Analyst II

man

Source Reference: submitted plans and NDSL Deeds and Maps on File 16126 16076

State Land Office • State Land Use Planning Agency • Nevada Tahoe Resource Program • Q1 Conservation Bond Program 901 S. Stewart Street, Suite 5003 • Carson City, Nevada 89701 • p: 775.684.2720 • f: 775.684.2721 • lands.nv.gov



			Silver State 1721 E. Sny Carson Cit Seana McM PI Supervise smcmanus 775.977.524 Customer N Nevad Public Markus Date: January 4, 2022 Proof Title: PulicWorks_EV_ Scale: Not to Scale Drawn By: Graphi Comments and/or Logos / art approxima on items or otherwise	e Industries yder Ave. y, NV 8970 <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or <i>Janus</i> or
Item Artwo back o stone i Cultur	Description: rk for lower front, upper front and of EV charging station. Printed color mage with Steward Indian School ral Center logo approx. as shown.	Please examine this proof carefully. Upon your approval, please initial and return with signed quote letter. CHANGES and/or ALTERATIONS to this order will change the promised delivery date and additional charges may apply. Production will begin upon initialed drawing and signed quote letter.	Marketing Ap Supervisor Ap	proval:



IMPROVEMENT PLANS FOR **ACCESS ROAD REPAIRS & MAINTENANCE STEWART COMPLEX** CARSON CITY, NEVADA SPWD Project No. 21-S05(3)

ABBREVIATIONS:

VIATIONS LISTED BELOW MAY NOT BE INCLUDED IN THIS PLAN SET)

AC ADA AFG APPROX. AP BC BF BFG BLDG BOS BOW C&G € COMP CONC CU YD DG DIA DWG EC EL EL	ASPHALTIC CONCRETE AMERICANS WITH DISABILITIES ACT ABOVE FINISH GRADE APPROXIMATE ANGLE POINT BEGINNING OF CURVE BACKFLOW PREVENTOR BELOW FINISHED GRADE BUILDING BOTTOM OF STEP BACK OF SIDEWALK CURB AND GUTTER CENTERLINE COMPACTION CONCRETE CUBIC YARD DECOMPOSED GRANITE DIAMETER DRAWING END OF CURVE ELECTRIC ELEVATION
EX. FDC	EXISTING FIRE DEPARTMENT CONNECTION
FF	FINISHED FLOOR
FIG. FH	FIRE HYDRANT
FT	FEET
G	GAS LINE
GS	GROUND SHOT
IF	
IRR	IRRIGATION
MAX	MAXIMUM
M.D.D.	MAXIMUM DRY DENSITY
M.E.	MATCH EXISTING

1IN	MINIMUM
1	NORTH
INVMC	NORTHERN NEVADA VETERANS MEMORIAL CEMETER
JHP	OVERHEAD POWER
PIV	POINT OF COMPOUND CORVE
POL	POINT ON LINE
POC	POINT ON CURVE
P	POWER POLE
PRC	POINT OF REVERSE CURVE
VC	POLYVINYL CHLORIDE
ξ	RADIUS
RPBF	REDUCED PRESSURE BACKFLOW ASSEMBLY
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
ЯΗТ	SHEET
SPWD	STATE OF NEVADA PUBLIC WORKS DIVISION
S	SANITARY SEWER
SMH	SANITARY SEWER MANHOLE
ГВС	TOP BACK OF CURB
ГC	TOP OF CONCRETE
ГОС	TOP OF CURB
TOW	TOP OF WALL
S	TOP OF SLOPE
YP.	
/V ^/N/1	
/VI*I ∧/\/	
/G	VALLEY GUTTER
	FFFT
	INCHES
%	PERCENT

LEGEND

—— EX 12"W——	EX. WATERLINE
T	EX. TELEPHONE
——— E ———	EX. ELECTRIC
G	EX. GAS
——EX SD ——	EX. STORM DRAIN
——EX SS ——	EX. SANITARY SEWER
SSCO ⊙	EX. SANITARY SEWER CLEANOU
	EX. WATER VALVE
ъ	EX. FIRE HYDRANT
	NEW STORM DRAIN



SHEET C1 - TITLE SHEET

	ŬŤ		
SHEET	C2	-	GE
SHEET	C3	-	PR
SHEET	C4	-	DE

OWNER: NEVADA STATE PUBLIC WORKS CONTACT: MARKUS MCENTEE 515 E. MUSSER STREET, STE. 102 CARSON CITY, NEVADA 89701 (775) 684-4141

DEPARTMENT OF PUBLIC WORKS.

AS A PART OF THIS PROJECT.

SHEET INDEX:

ENERAL NOTES AND SPECIFICATIONS ROPOSED SITE PLAN ETAILS

(NEED TO ADD REDUCED VIEW SHOWING ENTIRE PARCEL)



ENGINEER:

RESOURCE CONCEPTS, INC. CONTACT: JOE CACIOPPO, P.E. 340 NORTH MINNESOTA STREET CARSON CITY, NEVADA 89703 (775) 883-1600

BASIS OF BEARINGS:

THE BASIS OF BEARINGS IS THE BASE MAP PROVIDED HEREIN BY THE STATE OF NEVADA

BASIS OF ELEVATION:

THE BASIS OF ELEVATION IS NAVD 88 PER CARSON CITY SURVEY CONTROL RECORDS, NOT USED



Righte

eying

ngineering Resources



Know what's **below. Call** before you dig.

50% CONSTRUCTION DRAWINGS

GENERAL NOTES

- 1. The Contractor shall notify the Project Engineer of any and all discrepancies between the information shown on these plans and conditions existing in the field. Upon notification of any discrepancies, the Project Engineer shall instruct the Contractor on how to proceed. Any required changes must be approved in writing by Project Engineer in advance of said changes. Any subsequent changes due to the Contractor proceeding without instruction and written approval will be at the Contractor's expense.
- 2. Prior to the start of construction activities, the Contractor shall conduct a pre-construction conference with the State Public Works Division (SPWD) and Project Engineer. All parties shall be contacted at least forty-eight (48) hours prior to the scheduled conference, which shall be conducted at least forty-eight (48) hours prior to construction unless otherwise required by the SPWD.
- 3. At the completion of construction, the Contractor shall schedule a final walk-through inspection with the Project Engineer and SPWD. All construction will be subject to final approval by the Project Engineer and SPWD. At the discretion of the Project Engineer, all improved areas shall be subject to a flow test to ensure constructed grades meet the intent of the plans. Improved areas deviating from these plans that do not drain properly, will be removed and reconstructed at the Contractor's expense.
- 4. All work shall conform to "Standard Specifications for Public Works Construction" (Orange Book), "Standard Details for Public Works Construction," SPWD requirements, the Occupational Safety and Health Administration, (OSHA) requirements for excavation, the latest SPWD adopted International Building Code, special requirements of the project, and as shown on the plans. Violations will result in the stoppage of all work until the violation is corrected.
- 5. All construction shall be performed in compliance with the Air Quality Permit from the State of Nevada, Division of Environmental Protection, concerning Air Pollution Control Regulations. The Contractor shall maintain an on-going dust suppression program using the application of water and/or dust palliative and control dust to the satisfaction of the Engineer. Water and other materials used for dust control will be at the contractor's expense.
- 6. Details not shown on these plans are per Orange Book and SPWD standards.
- 7. The Contractor will be responsible to obtain all permits as necessary prior to the beginning of construction and include any fees in their proposal. The contractor shall comply with the requirements of said permits.
- 8. The Contractor shall maintain traffic control conforming to the Nevada Work Zone Traffic Control Handbook, The Manual on Uniform Traffic Control Devices (MUTCD), and SPWD Requirements.
- 9. The Contractor acknowledges that all work pertaining to these plans is to occur on State property, and State personnel and the public may be in the vicinity of the project site. The Contractor shall take all reasonable measures to ensure public safety around the project site is maintained.
- 10. The Contractor shall support trench sidewalls in accordance with all applicable laws and governing safety regulations. Sheeting, shoring, bracing, and sloping shall be used to protect workers and adjacent structures, and shall conform to appropriate specifications of the OSHA Standards 20 CRF Part 1926, Subpart P.
- 11. The Contractor shall maintain a clean project site, to include adjacent streets, sidewalks, properties and storm drain systems, including removing or neatly stockpiling construction debris at the end of each activity day with temporary erosion control in place. All facilities shall be maintained free of dust and mud caused by grading operations. All operations shall comply with the requirements of a Stormwater Discharge Permit from the Nevada Division of Environmental Protection.
- 12. Protective measures and temporary drainage provisions shall be used to protect adjoining walkways, buildings, landscaping and properties during construction. Temporary devices shall be in accordance with SPWD requirements.
- 13. All work shall be coordinated with the Project Engineer and SPWD. No additional payments for extra work will be made to the Contractor, without prior written authorization by the Project Engineer and SPWD.
- 14. Resource Concepts, Inc. performed a limited geotechnical investigation for the purpose of recommending a pavement section. No additional geotechnical investigation is expressed or implied. The contractor shall address any questions related to encountered field conditions to the Project Engineer.
- 15. Contractor shall coordinate with the Owner for temporary location of the trash and recycling dumpsters in order to provide continuous access and allow for service

SITE SURVEYING

- 1. The Contractor is responsible for the cost of all surveying services.
- Resource Concepts, Inc. (RCI) is available to provide all construction staking. All construction staking requests will be submitted on an RCI Construction Staking form to be provided to the contractor at the pre-construction meeting. The Contractor shall notify the Project Engineer a minimum of three (3) working days prior to needing stakes to ensure adequate time to schedule surveying.
- 3. The Contractor shall be responsible for all grade checking of subgrade, base, and paving depicted on these plans. Delays, removal of work, or other issues arising from the contractor not building to or verifying stakes before said work shall be at the contractor's sole expense.

UTILITY NOTES

- 1. The Contractor shall call Underground Service Alert "CALL BEFORE YOU DIG" (811) forty-eight (48) hours prior to the start of construction.
- 2. The contractor shall include in his bid all costs associated with hiring a private utility location firm to locate and identify all on-site utilities that cannot be identitifed by Underground Service Alert.
- 3. RCI did not perform a survey of existing underground utilities, nor were current records made available to RCI. Utilities shown are based on observations of surface conditions and site meetings with the Owner. The Contractor shall field verify utility locations within and near the construction limits with the Owner and respective utility companies prior to beginning construction operations. It shall be the Contractor's responsibility to pothole and arrange for the necessary relocation of any utility at least forty eight (48) hours prior to beginning work. Potholing and related expenses shall be included within the Contractor's bid. No additional compensation will be awarded by the Owner.
- 4. All utilities impacted by improvements shall be raised/lowered, removed, or relocated, as applicable to accommodate intended improvements. Damage to any existing structures or utilities due to construction related activities, shall be repaired or replaced at the Contractor's expense. Repairs and replacements shall be conducted in accordance with all applicable regulations, and shall be subject to inspection and final approval by the Project Engineer.
- 5. Construction or other traffic shall not be permitted to cross in-place utilities or structures until a safe minimum depth of fill is applied. Fill shall be at the Contractor's discretion and in accordance with Orange Book standards. Damaged utilities shall be repaired or replaced at the Contractor's sole expense.

GRADING NOTES

- 1. The extent of clearing, grubbing and stripping operations shall be as required, and as directed by the Project Engineer. All areas to be cleared, grubbed and stripped must first be staked by the Contractor and reviewed by the Project Engineer.
- 2. Included in this work shall be the preservation from injury or defacement, and the replacement, in kind, to the satisfaction of the Owner and Project Engineer, any such injured or defaced vegetation or other objects not designated for removal. The Contractor shall assume full responsibility for any and all injured or defaced structures, utilities, or any other objects intended to remain.
- 3. Clearing and grubbing shall be accomplished in accordance with all applicable Orange Book standards. Clearing and grubbing shall be performed prior to any other work

SHEETING, SHORING BRACING, AND SLOPING

- 4. Shoring shall be provided in accordance with Section 305 of the Standard Specifications for Public Works Construction (Orange Book). Shoring shall be required on all structure and trench excavations greater than four (4) feet unless other safe and allowable means, in accordance with all applicable laws and regulations, are implemented for excavation.
- 5. The Contractor shall notify the Project Engineer immediately if during construction subsurface conditions are different from those anticipated.
- 6. The Contractor is reminded that the Owner has not so delegated, and the Project Engineer does not claim to be a trench or excavation system safety expert, nor is the Project Engineer so engaged in that capacity under this Contract. As such, the Project Engineer has neither the authority nor the responsibility to enforce construction safety laws, rules, regulations, procedures, or to order the stoppage of work for claimed violations of trench or excavation safety. The furnishing by the Project Engineer of resident representation and inspection personnel shall not make the Project Engineer responsible for the enforcement of such laws, rules, regulations, or procedures, nor shall such make the Project Engineer responsible for the construction means, methods, techniques, sequences, procedures, or for the Contractor's failure to properly perform the work necessary for trench and excavation safety.

SITE GRADING AND EMBANKMENT FILL

- 7. Construct only when weather conditions will not detrimentally affect the quality of the finished work. Any portion of embankments, fills or subgrades that are damaged by the effects of rain, wind, or other weather conditions during any phase of construction shall be aerated if excessively wet, moistened if excessively dry, reshaped and recompacted by the Contractor to conform to the requirements of the specifications, without additional cost to the Owner, and inspected/approved by RCI.
- 8. Site grading shall be completed in conformance with lines and grades shown on the Contract Drawings or as directed by the Project Engineer.
- 9. All AC or PCC surfaces shall be graded to a tolerance of plus or minus 0.04 feet, unless a tighter tolerance is required to facilitate drainage and the intent of the plans.
- 10. Backfill all depressions and holes below the ground surface with fill material, whether caused by stripping or otherwise, to the ground surface prior to construction of the fill. Blading and rolling shall continue until the surface is smooth, free from waves and irregularities, and in conformance with the elevations shown on the Contract Drawings. If at any time the material is excessively wet, it shall be aerated by means of blade graders, harrows, or other suitable equipment until the moisture content is satisfactory. The surface shall then be compacted and finished as specified in these plans.

29. Compaction control, sampling, and testing shall be arranged through submittal of the SPWD Inspection Request Form in accordance with the Standard Specifications for Public Works Construction (Orange Book), except as modified herein. RCI is available to conduct testing. Results will be provided to the Project Engineer within 24 hours. The Contractor shall arrange for testing with the RCI Geotechnical Engineer and Construction Manager.

- DEWATERING

- standards.

Section 324 - Painting, pavement striping, and marking

STRUCTURAL EXCAVATION, FILL AND BACKFILL

11. Structural backfill shall be suitable native material or Class E Backfill in accordance with Section 200.03.06 of the Standard Specifications for Public Works Construction (Orange Book). On-site native backfill material shall be free of all roots, debris, large stones, organic material and any other deleterious material as determined by the Project Engineer. The Project Engineer shall make the determination regarding suitability of the native material.

12. If the native material is determined to be unsuitable for use as structural backfill, or if there is an inadequate quantity of suitable native material, import fill material shall be used. Import structural backfill shall meet the requirements of these specifications.

13. Excavation of every description, classification, and substances encountered within the grading limits of the project shall be performed to the lines and grades indicated on the Contract Drawings, and in accordance with applicable safety standards.

14. The Contractor shall inform the Project Engineer and satisfy himself as to the character, quantity and distribution of all material to be excavated. Should the Contractor excavate below the designated lines and grades without prior permission, he shall replace such excavation with suitable materials, in a satisfactory manner and condition, at his own expense.

15. The Contractor shall excavate sufficiently to provide adequate, safe working areas between outside structures and the earth banks.

16. During the process of excavation, the Contractor shall maintain the grade in such condition that it will be drained at all times, and install temporary drains and drainage ditches to intercept or direct surface water which may affect the promotion or condition of the work.

17. The Project Engineer shall have complete control over utilization of all excavated material and shall determine the suitability of excavated material to be used as backfill. All unsuitable and excess excavated material shall be disposed of offsite, in accordance with local, state, and federal requirements.

18. If excavated material is deemed suitable as backfill by the Project Engineer at the time of excavation, the Contractor shall separate it from the unsuitable material. The excavated soil shall be stockpiled and protected from weather. If the Contractor does not protect the excavated materials, the Contractor shall replace material that becomes unsuitable at no additional cost to the Owner.

19. If the subgrade is determined to be unsuitable by the Project Engineer, over-excavation of unsuitable materials shall be coordinated with the Project Engineer. The Contractor shall receive written guidance from the Project Engineer prior to proceeding.

20. The Contractor shall at all times provide and maintain ample equipment to remove and dispose of all water entering the excavation or other parts of the work, and shall keep said excavation dry and free of frost or ice until the structure to be built therein is completed and backfilled. If water is not removed and disposed of and the excavation not kept dry, over-excavation and backfill with selected materials shall be at the Contractor's expense. The Contractor shall be held responsible for the conditions of any sewers, drains, or other conduits or pipelines, related to construction operations, which may be used for drainage purposes. Such pipes or conduits shall be cleaned and free from sediment after use.

21. Structural fill shall be placed under structures and over the prepared subgrade, as necessary to bring the subgrade to elevations shown on the Contract Drawings. The entire structure bearing prism, defined as the volume directly beneath the structure and extending downward and outward at a 1:1 slope from the outside base perimeter of the structure to undisturbed suitable or prepared subgrade, shall be structural fill.

22. Structural fill shall be placed to a tolerance of plus or minus 0.1 feet.

23. No backfill shall be placed against any cast-in place concrete structure until permission is given by the Project Engineer and preferable not until the cast-in place concrete structure has met 70 percent of the minimum twenty-eight (28) day strength requirements.

24. The Contractor assumes full responsibility for ensuring subgrade and base elevations are established. The Contractor shall verify subgrade and base elevations and thickness before base & asphalt concrete or concrete is placed. Failure to meet specified grades and thickness will require removal of material and regrading at the Contractor's sole expense.

25. The Contractor shall contact the Project Engineer prior to paving to verify grades and base thicknesses. Failure to meet specified grades and thickness will require removal of material and regrading at the Contractor's sole expense.

SUBGRADE PREPARATION

26. Activities include conditioning the existing subgrade material following pulverization operations; demolition; and, excavation activities. The Contractor shall drain any standing water. The exposed surface shall be pre-rolled to provide a degree of compaction to near surface soils, and to delineate any soft areas that may be present.

27. Settlement or washing that may occur, or any other cause, prior to acceptance of the work, shall be repaired by the Contractor at his own expense. The Contractor shall also re-establish grades to the elevations and slopes shown on the Contract Drawings at his own expense.

28. The Contractor assumes full responsibility of ensuring subgrade elevations are established. The Contractor shall verify subgrade elevations before base material is placed. Failure to meet specified grades and thicknesses will require removal of material and regrading at the Contractor's sole expense.

COMPACTION CONTROL AND TESTING

30. If the material being placed should require moisture conditioning in order to compact properly, the Contractor shall bear all costs of water.

31. Control Tests: For determining maximum dry density (MDD), the Percent Compaction, as used in these specifications, shall be defined pursuant to laboratory test method ASTM D1557. In-place density of compacted backfill shall be determined by ASTM D1556 and ASTM D2216, or by nuclear density test procedures per ASTM D2922 and ASTM D3017.

32. Frequency of Testing: The Geotechnical Engineer shall perform tests to confirm compliance with these specifications at a frequency determined by the Geotechnical Engineer, in accordance with Orange Book standards.

33. Retesting: If compaction fails to meet the specified requirements, the Contractor shall remove and replace the material at proper density, or shall bring the density up to specified levels by other means acceptable to the Geotechnical Engineer at no additional costs to the Owner. Subsequent confirmation tests required to confirm that the reconstructed backfill has been brought up to specified density shall be paid for by the Contractor. Frequency of confirmation tests for remedial work shall be generally doubled of that specified for initial confirmation tests. The cost of confirmation testing will be deducted from the partial payment period in which the retesting was recorded, unless otherwise established by the Owner in the contract documents.

34. Access to Work and Materials: The Contractor shall at all times allow access to materials for testing. Compaction control testing may require stoppage of work while testing is being performed.

35. Aggregate base and structural fill shall be compacted in 8" loose lifts to a minimum of 95% of the Modified Proctor maximum dry density, in accordance with ASTM D1557. Subgrade and non-structural fill shall be compacted in eight (8) inch loose lifts to 90% maximum dry density. The moisture content of the material shall be within three (3) percent of the material's optimum moisture content. Each lift must be tested and meet the above requirements for compaction and moisture content before the next lift can be placed.

CONSTRUCTION MATERIALS

1. The Contractor shall be required to coordinate with the Owner to ensure local regulations are adhered to. Required permits shall be addressed in the Contractor's dewatering plan.

2. All trench excavations shall be dewatered to keep them dry during construction.

3. The Contractor shall base his bid on the amount of water he anticipates affecting the work, and the nature of the material in which it will appear. No separate or extra payment of any kind will be made for pumping or otherwise dewatering any excavation, but shall be included in the applicable unit price or lump sum bid prices in the Contractor's proposal.

4. The Contractor shall be required to comply with all federal, state, and local receiving water quality requirements that may be applicable.

HOT-MIX ASPHALT PAVING

5. Asphalt concrete shall be a PG64-28NV Type 3 (polymer) asphalt-concrete mix with lime, or equivalent, in accordance with Orange Book Standards.

6. Work covered in this section shall consist of, but not be limited to, one (1) or more courses of bituminous mixture constructed on the prepared foundation in accordance with the lines and grades shown on the Contract Drawings. This work shall consist of adding mineral filler (hydrated lime or Portland cement) to bituminous mixtures, as necessary, and include general requirements that are applicable to all types of bituminous pavements of the plantmix type irrespective of gradation of aggregate, kind and amount of bituminous material, or pavement use. Work shall be in accordance with the Contract Drawings, these specifications, Standard Specifications for Public Works Construction (Orange Book), and SPWD standards.

7. The following Orange Book specification sections contain requirements that relate to this Section. Additional sections, not necessarily listed below may contain requirements related to this project. The Contractor shall be responsible for adhering to all applicable sections of the Orange Book and SPWD

Section 201 - Bituminous material Section 316 - Tack coat Section 317 - Seal coats Section 318 - Slurry seals Section 319 - Roadmix bituminous surface Section 321 - Plantmix bituminous open-road pavement

Section 322 - Hot plantmix recycled bituminous pavement

8. The bituminous plantmix shall be composed of a mixture of aggregate and bituminous material. The several aggregate fractions shall be sized, uniformly graded, and combined in such proportions that the resulting mixture meets the grading requirements of the jobmix formula, which will be based upon the approved mix design. The proposed formula submitted shall include definite single values for:

a. The percentage of aggregate passing into each specified sieve. The percentage of bitumen to be added (to one-tenth (0.1) percent). The temperature of the mixture leaving the mixer.

The temperature of the mixture in the hopper of the paving machine.

9. Plantmix bituminous pavements consisting of materials as specified in Section 321 of the Orange Book shall be used in the construction of the areas to be paved. If conflicts arise between these specifications and the Orange Book specifications, the Orange Book specifications shall have jurisdiction.

CONCRETE

- Standard PD1 for plywood

- 14. Exposed plywood surfaces, new/new condition, shall be APA High Density Overlaid Plyform Class 1 and 11

 - purpose.
 - struts cannot be secured.
 - deflections.
- 20. The Contractor shall keep oil or other agents from getting on reinforcing steel, embedded items, or other surfaces requiring bond with concrete.
- shall be completed in advance of placing on concrete.

face will not be permitted.

- deposited therein.
- expense.
- strength requirement, and may be increased based on the anticipated loads.
- said requirements for exposure to freeze-thaw environments.

- PAVEMENT CRACK SEALANT
- 31. Crack sealant shall meet ASTM D6690 Type II requirements

Cono Bonotration	00
Cone Penetration	90
Flow	3n
Resilience	60
Bond, -20°F (-29°C), 50% ext.	Pa
Asphalt Compatibility	Co
Recommended Pour Temp.	38
Safe Heating Temp.	41

or approved equa

MICRO-SURFACING

for this project. Materials shall meet the following requirements:

Residual Asphalt (%):	5.5
Mineral Filler (%):	0.0
Air Temp. at Application:	50°

Type I/II Portland Cement Aluminum Sulfate (37% Solution) 0.0-1.0 Emulsion (based on 67.3%) Residual Solids Content 100% Aggregate

Sieve A	nalysis (Pe	rcent by wei	ght pass
3/8"	4	<u>8</u>	16

100 90-100 65-90 45-70 30-50

Mixture Characteristics Mix Time 77°F

12 kg-cm (Min 20 kg-cm (Min Wet Stripping

CAPE SEAL

Cohesion

Wet Track

Excess Asphalt

TO BE ADDED...

10. The Contractor shall comply with all Orange Book standards, and the Manual of Standard Practice for Detailing Reinforced Concrete Structures, ACI 318 and Manual of Standard Practice, Concrete Reinforcing Steel Institute. Materials shall comply with the following quality assurance regulations:

11. Recommended Practice for Concrete Formwork, ACI 437; 2012 International Building Code (IBC), as adopted by the State of Nevada; U.S. Product

12. On delivery to the job site, the Contractor shall place materials in an area protected from weather. The materials shall be stored above ground on a framework of blocking with a cover of protective waterproof material, providing adequate air circulation and ventilation.

13. Unexposed plywood surfaces, new or in new condition, shall be APA B-B Plyform Class 1 and 11 Exterior.

15. Steel forms shall be of sufficient thickness to prevent noticeable deflection and be galvanized and/or coated to prevent rust and staining.

16. Design and formwork shall safely support vertical and lateral loads that might be applied, until such loads can be supported by the concrete structure. Vertical and lateral loads shall be carried by the formwork system to the ground, or to in-place construction that has attained adequate strength for that

17. The Contractor shall provide shores and struts with positive means of adjustment, capable of taking up formwork settlement during concrete placing operations, using wedges or jacks or a combination thereof. The Contractor shall provide trussed supports when adequate foundations for shores and

18. Form facing materials shall be supported by structural members spaced to prevent deflection. Provide camber in formwork, as required, for anticipated

19. Formwork shall be readily removable without impact, shock, or damage to cast-in-place concrete surfaces requiring bond with concrete.

21. Before concrete is placed in any form, the Contractor shall verify horizontal and vertical form position, and correct all inaccuracies. All wedging and bracing

When setting form ties, the Contractor shall not allow metal to remain in wall closer than 1-1/2 inches from surface. Ties shall fit tight to prevent mortar leakage at holes in forms. Ties shall be protected from rusting at all times. No wires or wood spreaders will be permitted. Cutting ties back from concrete

23. At construction joints, anchor forms by using an adequate number of form ties in the new pour, a few inches from the construction joints. Do not rely on ties to any of the horizontal or vertical joints used in previous placements.

24. All dirt, chips, sawdust, mud, water and other foreign matter shall be removed from within the forms or within the excavation areas before any concrete is

25. Any form movement or deflection during construction, or finished surface variations, in excess of 0.04 feet will be a basis for rejection, at the Contractor's

26. Do not remove forms and supports until concrete has attained sufficient strength to support anticipated loads. 70% of the 28-day strength is the minimum

27. Concrete shall be fiber reinforced (at a minimum of 1 pound per cubic yard), with coarse aggregate gradation conforming to size No. 67 per section 200.05.03 of the Orange Book, and shall have a 1 to 4 inch slump, and 4 to 7 percent entrained air, 4000 psi min. compressive strength @ 28 days, min. 6 sacks of type II cement per cubic yard, and a max. water/cement ratio of 0.45. All materials shall conform to Section 202 of the Orange Book and meet

28. Existing concrete shall be removed to the nearest expansion or construction joint.

29. New concrete shall have a heavy broom finish perpendicular to the predominant direction of travel.

30. AC pavement edge shall be $\frac{1}{4}$ inch to $\frac{1}{2}$ inch above the lip of gutter. Exception: AC pavement edge shall be flush to $\frac{1}{4}$ inch above the lip of gutter when located adjacent to a pedestrian ramp, within an accessible route or bike lane.

) Max. mm Max. 0% Min. ass 3 Cycles ompatible 80°F (193°C) 10°F (210°C)

32. Crack fill material needs to fill the entire depth of the crack to ensure bridging of the asphalt sections, per manufacturer specifications. Crafco Roadsaver 221

33. Micro-surfacing materials and application shall be in accordance with the International Slurry Surfacing Association (ISSA) guidelines and the Standard Specifications for Public Works Construction (Orange Book). Contractor shall be responsible for the submittal of all materials associated with micro-surfacing

> 5-9.5 .0-3.0 50°F Min.

Job Mix Formula (JMF) based on dry weight of aggregte and total water as needed.

0.0-1.0 12.0-14.0 8.1-9.4

sing sieve) in accordance with Orange Book Table 200.02.06-1.

100 200 18-30 10-21 5-15

77°F	120s (Min.)	Method: ISSA TB 113
12 kg-cm (Min.)	30-Minute	Method: ISSA TB 139
20 kg-cm (Min.)	60-Minute	Method: ISSA TB 139
Pass 90% (Min.)		Method: ISSA TB 114
528 g/m2 (Max.)	1-Hour Soak	Method: ISSA TB 100
	6-Day Soak	Method: ISSA TB 100
438 g/m2 (Max.)	Sand Adhesion	Method: ISSA TB 109



50% CONSTRUCTION DRAWINGS

SHEET C2

21-294.

JEC

DEC. 8, 2021

JOB NO.:

DATE:

ESIGNED:

RAWN: HECKED:





BASE SHALL COMPLY WITH ORANGE BOOK STANDARDS.
 THICKNESS SHOWN ARE MINIMUMS. MATCH EX. IF EXISTING IS GREATER.



TYPICAL PCC CROSSING IN TRAVELLED WAY

2. THICKNESS SHOWN ARE MINIMUMS. MATCH EX. IF EXISTING IS GREATER.

1. BASE SHALL COMPLY WITH ORANGE BOOK STANDARDS.







- SURFACES.
- NOTES

- COMPACT BASE TO 95% MDD, MIN) SCARIFY TO 8" & COMPACT SUBGRADE TO 90% MDD, MIN)







- ASPHALT CONCRETE PLANT MIX

SEAL. 5" MIN DEPTH OR MATCH

EXISTING SECTION WHICHEVER IS

REPLACEMENT PATCH W/FOG

GREATER

(COMPACT TO 95% MAX DENSITY)

ADD CAPE SEAL DETAIL OR NOTES



PLAN VIEW (STANDARD)

ALL NEW PARKING STALL STRIPING SHALL BE WHITE WITH A MINIMUM WIDTH OF 4 INCHES. PAINT SHALL BE SPECIFIED "TRAFFIC STRIPING PAINT" OR HAVE MANUFACTURER'S CERTIFICATION OF SUITABLE APPLICATION ON ASPHALTIC AND CONCRETE SURFACES.

ALL NEW ISLAND OR ACCESS AISLE STRIPING SHALL BE YELLOW, SPACED 24 INCHES ON CENTER, UNLESS OTHERWISE SHOWN ON THESE PLANS. PAINT SHALL BE SPECIFIED "TRAFFIC STRIPING PAINT" OR HAVE MANUFACTURER'S CERTIFICATION OF SUITABLE APPLICATION ON ASPHALTIC AND CONCRETE

3. ALL PARKING SPACES ARE 18.5 FEET LONG BY 9 FEET WIDE, UNLESS OTHERWISE NOTED. A TWO-FOOT OVERHANG IS ALLOWED AT CURBS WHERE THERE IS NO CONFLICT WITH STRUCTURE OR LANDSCAPING. PARKING STALL WIDTHS ARE MEASURED FROM CENTER OF STRIPING

ADA PARKING SPACES SHALL BE EQUIPPED WITH A SIGN DESIGNATED, "HANDICAP PARKING ONLY" AND A STRIPED ADA PARKING SYMBOL.

THE CONTRACTOR SHALL REVIEW THE STRIPING PLAN WITH THE PROJECT ENGINEER AND THE OWNER PRIOR TO CONSTRUCTION TO ENSURE STRIPING MEETS OWNER'S REQUIREMENTS.

6. "NO PARKING" LEGEND TO BE PAINTED YELLOW WITH 36" LETTERS.

TYPICAL PARKING STRIPING

NO SCALE





4" WHITE BORDER

(3' SQUARE)

3" WHITE SYMBOL

(TYP.)



NO. REVISION 1 NOTE 8 2 NOTE 2 & approved by: 🔁

ADA PARKING SYMBOL

NO SCALE



2. BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF CLASS E BACKFILL AS SPECIFIED IN SUBSECTION 200.03.06 OF THE SSPWC. MATERIAL SHALL BE PLACED IN LIFT THICKNESS SPECIFIED IN SUBSECTION 2 305.10 OF THE SSPWC AND DENSIFIED TO 90% RELATIVE COMPACTION PER ASTM D1557 MODIFIED PROCTOR.

3. BEDDING SHALL CONFORM TO THE REQUIREMENTS OF CLASS A BACKFILL AS SPECIFIED IN SUBSECTION △ 200.03.02 OF THE SSPWC. MATERIAL SHALL BE DENSIFIED TO 90% RELATIVE COMPACTION PER ASTM D1557

4. PLANS SHALL INCLUDE A DETAIL FOR SUBGRADE STABILIZATION INCLUDING BACKFILL MATERIAL, STRUCTURAL GEOTEXTILE FILTER FABRIC AND MODIFIED CUTOFF COLLARS WHEN POTENTIAL FOR UNSTABLE SUBGRADES EXIST, SUBJECT TO THE APPROVAL OF THE CARSON CITY ENGINEER OR PUBLIC WORKS DIRECTOR.

5. FOR TRENCHES IN ROADWAY SECTION, SEE PAVEMENT PATCH DETAIL (DWG. No. C-5.1.6). 6. FOR THE PURPOSE OF PAYMENT; EXCAVATION AND BACKFILL QUANTITIES ARE BASED ON THESE STANDARD DRAWINGS, AND NO ADDITIONAL COMPENSATION WILL BE MADE. SHORING OR SLOPED CUT SLOPES MAY BE NECESSARY, BUT THERE WILL BE NO ADDITIONAL PAYMENT. ALL EXCAVATIONS SHALL CONFORM TO THE LATEST O.S.H.A. REQUIREMENTS.

7. PLACE WARNING TAPE 1 FOOT ABOVE ALL BURIED PIPES AND CONDUITS.

8. TRACER WIRE SHALL BE 12 GAUGE (MINIMUM THICKNESS) INSULATED SOLID COPPER WIRE. INSULATION SHALL BE 30 MIL HDPE. PLANS SHALL SPECIFY WIRE STRENGTH AND INSULATION THICKNESS FOR BORING APPLICATIONS. SPLICES SHALL BE CONNECTED BY WIRE NUTS, SEALED WITH AQUA SEAL OR SILICON FILLED, AND DOUBLE WRAPPED WITH U/L LISTED ELECTRICAL TAPE. TRACER WIRE COLOR SHALL BE, BLUE FOR WATER, PURPLE FOR RECLAIMED WATER, GREEN FOR SEWER AND YELLOW F

N	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION
	9/17		PUBLIC WORKS
: 3	, 12/19	TRENCH EXCAVATION	DRAWING NO. (305)
		AND BACKELL	DATE (303)
3	12/19	AND DACKITLL	DEC 2019





Know what's **below. Call** before you dig.

50% CONSTRUCTION DRAWINGS