

State Planning and Research Program Quarterly Report

PROJECT TITLE: *Salt Shed Design Template*

OBJECTIVES: The purpose of this project is to develop three salt shed scalable designs that can be used as templates by agencies for a variety of sites. The designs will consider a number of factors including code adherence, incorporation of state and federal regulations associated with environmental and related concerns, pad design, material selection options, construction techniques, and easy design modification.

PERIOD COVERED: October 1, 2021 – December 31, 2021

PARTICIPATING AGENCIES: Minnesota Department of Transportation and the Clear Roads Technical Advisory Committee

PROJECT MANAGER:
Hafiz Munir / Tom Peters

LEAD AGENCY: MnDOT

PRINCIPAL INVESTIGATOR:
Wilfrid Nixon, Wilfred A. Nixon and
Associations, LLC

SP&R PROJECT NO:
MnDOT Contract No.
1044530

Federal Project Number:
TPF-5(353)

PROJECT IS:

 Planning
 Research & Development

ANNUAL BUDGET: \$83,326

PROJECT EXPENDITURES TO DATE: \$ 28,117.38

WORK COMPLETED:

- Task 1 – Literature Review: The draft of the literature review has been submitted to the technical advisory committee, and their comments are pending.
- Task 2 – Surveys of Practice: As noted in the prior QPR, the survey will focus solely on practice related to salt storage, since information collected from other mineral users indicated that the likelihood of similar storage (i.e. storage that was waterproof) being required in other mineral uses was minimal. Two stages of the work in this regard have been completed. First a draft of possible questions in the survey have been developed, and second, a listing of who should be surveyed is being developed. Obviously, all Clear Roads participating states will be surveyed, as will a number of other agencies that have relatively recently built new storage structures. These other agencies include the City of West Des Moines, and the City of Fort Collins. A memo detailing the survey targets will be provided to the technical advisory committee by the end of January.

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

- Task 1 – Literature Review: Upon receipt of comments from the TAC, the literature review will be edited and a draft final version will be provided.
- Task 2 – Survey of Practice: a draft survey and a listing of the survey targets will be provided to the TAC. Upon approval, the survey interviews will be conducted.
- Task 3 – Design Analysis and Recommendations: The design analysis will begin during the next quarter as the survey is draft and the interviews conducted. The survey will clearly provide insight into the desirable design features and thus a list of potential activities for this task will be developed.

STATUS AND COMPLETION DATE:

As noted in prior QPRs a revised schedule was requested and approved via amendment. The schedule is:

Task	Current Task Start Date	Current End Date for Task Approval	Revised Task Start Date	Revised Due Date to Submit Draft Deliverables	Revised End Date for Task Approval
1	1/5/2021	5/15/2021	1/8/2021	8/31/2021	10/31/2021
2	4/1/2021	10/15/2021	7/31/2021	1/31/2022	3/31/2022
3	8/1/2021	1/15/2022	1/31/2022	6/30/2022	8/31/2022
4	1/1/2022	5/15/2022	5/1/2022	8/31/2022	10/31/2022
5	3/1/2022	7/15/2022	7/1/2022	11/1/2022	1/1/2023