

MONROE COUNTY

MONROE COUNTY BOARD OF COMMISSIONERS

INVITATION TO BID

FOR

**THE PURCHASE, MAINTENANCE, REPAIR, AND
INSTALLATION OF PLAYGROUND EQUIPMENT**

FOR THE

MONROE COUNTY BOARD OF EDUCATION

BID NUMBER – CGD1128-05-20

**Monroe County Department of Finance
103 College Street South Ste 9
Madisonville, Tennessee 37354
(423) 442-9383**

**Monroe County Board of Commissioners
Madisonville, Tennessee 37354
(423) 442-9383**

Bid Prepared By:

Invitation to Bid Number:

Monroe County Finance Department

BOE1128-05-20

July 9, 2020

Sealed bids, subject to the specifications and conditions contained herein and attached hereto, will be received in the Finance Department, J.P. Kennedy Building, until, but no later than **10:00 A.M. (EST.)** local time prevailing, **July 9, 2020**, and then publicly opened and read for the Purchase of Playground Equipment for the Monroe County Board of Education, as authorized by the Monroe County Board of Commissioners.

No bid can be withdrawn after the scheduled closing time for receipt of bids for sixty (60) calendar days.

To be considered, your bid must be submitted on the copy of this Invitation to Bid. Bidders shall sign this form in the space provided and submit bid document to Monroe County Department of Finance, 103 College Street South Ste. 9, Madisonville, TN 37354. Bids shall be returned in the enclosed bid envelope, properly completed and sealed. Bids will not be accepted via fax machine or e-mail.

Time is of the essence and bids received after the announced time and date for submittal, whether by mail or otherwise, will be rejected. The date and time stamp in the Finance Department shall determine the time of receipt. Bidders are responsible for ensuring that the Finance Department personnel stamp their bids before the deadline indicated. Late bids received will be so noted in the bid file in order that the vendor's name will not be removed from any future bid/vendor list.

If you desire not to quote on the Invitation, please forward your acknowledgment of **NO BID**. Return of the "Terms and Signature Sheet" with authorized signature and indication of **NO BID** is appropriate. Failure to comply may cause for removal of your company's name from the bid list for subject commodity.

It is the policy of Monroe County, Tennessee to ensure compliance with Title VI of the Civil Rights Act of 1964; 49 CFR, Part 21. No person shall be excluded from participation in or be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance on the grounds of race, color, sex, disability, or national origin.

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party hereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to T.C.A. § 12-12-106.

1. Award

The County reserves the right to reject any or all Bids/Proposals, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids/Proposals. The County further reserves the right to reject the Bid/Proposal of any Bidder/Proposer whom it finds, after reasonable inquiry and evaluation, to not be responsible. The County may also reject the Bid/Proposal of any Bidder/Proposer if the County believes that it would not be in the best interest of the Project to make an award to the Bidder/Proposer. The County also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder/Proposer. More than one Bid/Proposal for the same work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder/Proposer has an interest in more than one Bid/Proposal for the Work may be cause for disqualification of the Bidder/Proposer and the rejections of all Bids/Proposals in which that Bidder/Proposer has an interest. If the Contract is to be awarded, the County will award the Contract to the Bidder/Proposer whose Bid/Proposal is in the best interest of the Project and/or the goods and/or services by Monroe County. Disputes arising from the award of the Bid/Proposal must be submitted in writing to the Monroe County Purchasing Agent and received no later than three (3) calendar days from contract award date. In the event no funds are appropriated by the County for the goods and services specified or insufficient funds exist for future orders, the County is under no obligation to make a contract award, contract renewal, or purchase.

2. Preparation of Bids/Proposals

- (A) Bidder/Proposers are expected to examine all Bid/Proposal documents. Failure to do so will be at the Bidder/Proposer's risk.
- (B) Each Bidder/Proposer shall furnish all information required by the Request. The Bidder/Proposer shall sign the Bid/Proposal documents; erasures or other changes shall be initialed by the person signing the offer.
- (C) Unit price shall include freight unless otherwise specified in the request. In case of discrepancy between any unit price and an extended price, the unit price shall govern.
- (D) Bidder/Proposers must state a definite time for delivery of supplies or for performance of services unless otherwise specified in the invitation.
- (E) Delivery time, when stated as a number of days, will include Saturdays, Sundays, and holidays.

3. Availability of Requested Items

Bidder/Proposers must accept responsibility for verifying availability of specified items prior to submission of Bid/Proposal. Bidder/Proposer shall notify the County no less than 96 hours prior to the Bid/Proposal deadline per Tennessee Code Annotated (T.C.A.) § 12-4-126 if specified items are discontinued, replaced, or will not be available for an extended period of time.

4. Restrictive or Ambiguous Specifications

It is the responsibility of the prospective Bidder/Proposer to notify Monroe County Purchasing if there is a question as to the specifications or bid/proposal procedures being formulated in a manner that would unnecessarily restrict competition. Any such question must be received no less than 96 hours prior to the Bid/Proposal deadline per T.C.A. § 12-4-126. These requirements also apply to specifications or procedures that are in error or ambiguous.

5. Delivery

Delivery will be f.o.b. destination unless otherwise specified in the Bid/Proposal document. This will apply to regular and normal stock items and special items which must be ordered direct from manufacturer.

6. Federal Tax and State Sales Tax

Purchases by the County are not subject to any state sales or federal excise taxes. Exemption certificates shall be furnished by the County upon the Contractor's request.

7. Addenda

No modifications to the Bid/Proposal shall be binding upon the County unless made in writing by an authorized representative of the Monroe County Purchasing Department. Bid/Proposal addenda, if issued, are posted on the County's website: www.monroetn.com. Prior to submitting a Bid/Proposal, it is the responsibility of the Bidder/Proposer to ascertain that they have received all addenda issued and bid/propose accordingly. No addenda will be issued later than 48 hours prior to Bid/Proposal deadline per T.C.A. § 12-4-126.

8. Submission of Bids/Proposals

- (A) Bid/Proposal shall be enclosed in a sealed envelope and addressed to the Monroe County Purchasing Department, 103 South College Street, Madisonville, TN 37354. The name and address of the Bidder/Proposer shall be identified on the face of the envelope along with the Bid/Proposal number and title. Bids/Proposals for construction projects exceeding \$25,000.00 must include the required contractor license information on the face of the envelope per T.C.A. § 62-6-119.
- (B) The County does not accept Bids/Proposals by facsimile or any electronic transmission. See Clause 9 under Terms and Conditions of the request for Bid/Proposal regarding Bid/Proposal modifications or withdrawal.
- (C) Samples of items, when required, must be submitted within five (5) calendar days and at no expense to the County unless otherwise specified by the County. If not consumed by testing, samples will be returned at Bidder/Proposer's request and expense unless otherwise specified in the Invitation.

- 9. Modification or Withdrawal of Bids/Proposals**
Bids/Proposals may be modified or withdrawn by signed written notice to Monroe County Purchasing or in person by an authorized Bidder/Proposer representative provided the modification or withdrawal is received prior to the Bid/Proposal deadline. A Bidder/Proposer representative making a modification in person shall have proper identification and shall initial the change. The Bidder/Proposer representative shall sign a receipt for the withdrawal of a Bid/Proposal. A telegraphic notice with an authorized signature would be acceptable for Bid/Proposal modification or withdrawal. It is the Bidder/Proposer's responsibility to confirm receipt of the modification or withdrawal. The telegraphic communications shall not reveal the Bid/Proposal price but shall provide the addition, subtraction or other modifications so that the final prices or terms will not be known by the County until the sealed bid is opened.
- 10. Late Bids/Proposals**
It is the responsibility of the Bidder/Proposer to deliver their Bid/Proposal or modification on or before the deadline date and time. The time of record will be the date/time stamp of the Monroe County Finance Department. Late bids/proposals will not be considered or returned.
- 11. Qualifications of Bidder/Proposers**
In evaluating Bid/Proposal, the County will consider whether or not the Bid/Proposal complies with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid/Proposal form or prior to the Notice of Award. The County will consider the qualifications of Bidder/Proposer and may consider the qualifications and experience of Subcontractors, Supplies, and other individuals or entities proposed for those portions of the work which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted. The County may conduct such investigations as the County deems necessary to establish the responsibility, qualifications, and financial ability of Bidder/Proposers, proposed Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work in accordance with the Contract Documents. Furthermore, the County may make such investigations as are deemed necessary to determine the ability of the Bidder/Proposer to perform the work and/or provide desired goods and/or services the Bidder/Proposer shall furnish all such information and data for this purpose as the County may request. The County reserves the right to reject any Bid/Proposal if the evidence submitted by the investigation of such Bidder/Proposer fails to satisfy the County that such Bidder/Proposer is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein.
- 12. Subcontracts**
The Bidder/Proposer is specifically advised that any person, firm, or other party to whom it is proposed to award a subcontract under this contract must be acceptable to and approved by the County.
- 13. Non-Collusion**
The requirements of State and Federal Antitrust Law, as well as the terms and conditions of the Bid/Proposal, require that all decisions made as to matters concerning this Bid/Proposal be made on an individual firm basis. By signing this Bid/Proposal, the Bidder/Proposer certifies that no company employees, agents, or representatives colluded in any respect with any other person or firm as to the terms and conditions of the company's Bid/Proposal. Any concerted activity with respect to this Bid/Proposal will be reported to the Antitrust Division of the Office of Attorney General, State of Tennessee.
- 14. Compliance with Applicable Laws**
The Bidder/Proposer shall comply with all laws relating to the manufacture, sale and purchases of items or services by County Governments insofar as they pertain to the purchase made under this contract.
- 15. Bid/Proposal Acceptance**
Bid/Proposal prices quoted shall be subject to acceptance by the County for a period of sixty (60) calendar days from the Bid/Proposal deadline, unless Bidder/Proposer indicates otherwise in their Bid/Proposal. If awarded the Bid/Proposal within the time frame specified, Bidder/Proposer agrees to furnish all goods and/or services described or specified in the Bid/Proposal.
- 16. Acceptance of Bid/Proposal Content**
The successful contractor's bid/proposal content shall become a contractual obligation if procurement action ensues. Failure of the successful Bidder/Proposer to accept these obligations in a contractual agreement may result in cancellation of the award.
- 17. Notification to County**
If no Bid/Proposal is to be submitted in response to this Bid/Proposal, it is not necessary to return the request; however, notice should be given to the County if the recipient wishes to remain on the County's Bidder/Proposer list for future solicitations.
- 18. Standard Contract**
The County reserves the right to incorporate standard county contract provisions into any contract negotiated as a result of any Bids/Proposals submitted in response to the Request for Bid/Proposal.
- 19. News Releases**
News releases pertaining to this procurement or any part of the Bid/Proposal shall not be made without the written approval of the County Purchasing Director.

Terms and Conditions of Purchase

1. Definitions

- A. The "County" is Monroe County, Tennessee, and includes its designated representatives.
- B. The "Contractor" is those mentioned as such "contractor, seller, vendor, supplier", in the contract and includes their designated representatives.
- C. The "Specifications" include instructions to vendors, the terms and conditions of purchase, the definitions and the technical specifications of the work.
- D. A "Subcontractor" is a person, firm or corporation having a contract with the Contractor to furnish labor and materials or both, or who perform services of the project.
- E. "Calendar Days" are consecutive days, as occurring on a calendar without regard to the day of the week, month, year, or holidays.
- F. The National Institute of Governmental Purchasing (NIGP) Online Directory of Procurement Terms, at www.nigp.org, will govern on questions as to any other definition in this contract.

2. Contract Terms

Upon award, the performance of the contract shall be covered solely by the terms and conditions set forth herein. Authorization to furnish goods/services will be made via purchase order, or blanket order as appropriate, signed by the County Purchasing Agent and Finance Director or other designated personnel. Any language contained on any invoice, shipping order, bill of lading or other document furnished by the seller at any time and the acceptance by the County of any goods/services to be furnished hereunder accompanied by any such document shall not be construed as an acceptance by the County of any terms or conditions contained in such document which are inconsistent with the terms and conditions set forth in this Invitation. Any different or additional terms contained in the seller's acceptance are hereby objected to.

3. Contract Modification

The contract expresses the complete agreement of the parties. Any changes hereto must be in writing and signed by the County Purchasing Agent. No other individual is authorized to modify the contract in any manner.

4. Delivery Requirement

To insure adequate service level to the people, the County requires that all goods or services ordered will be delivered when specified. Time is, therefore, the essence of this contract. If deliveries are not made or services performed at the time agreed upon, the County reserves the right to cancel its order and purchase the specified goods elsewhere and hold seller accountable therefore.

5. Transportation Charges

When terms of delivery or conditions of this order are f.o.b. destination, all transportation charges shall be paid by the seller.

6. Packaging

The County will not be liable for any charges for packaging, crating, carting, drayage, or storage in excess of the purchase price of this order unless stated otherwise herein.

7. Quantities

The County assumes no obligation for articles or materials shipped in excess of the quantity ordered hereunder. Any unauthorized quantity is subject to the County's rejection and return at seller's expense.

8. Indemnification and Insurance

If any work covered by this contract is to be done on the County's premises, Contractor agrees to carry liability and Worker's Compensation insurance satisfactory to the County and to indemnify the County against all liability, loss and damage arising out of any injuries to persons and property caused by the Contractor, his employees or agents. The Contractor will furnish written evidence of such insurance coverage if requested.

9. Inspection and Acceptance

The Contractor shall be responsible for all material(s) or service(s) until they are delivered and accepted. No material(s) or service(s) received by the County pursuant to this contract shall be deemed accepted until the County has had reasonable opportunity to inspect said material(s) or service(s). All material discovered to be defective or does not conform to any warranty of the seller herein, upon initial inspection or at any later time if the effects contained in the material(s) were not reasonably ascertainable upon inspection, may be returned at the seller's expense for full credit or replacement. No goods returned as defective will be replaced without buyer's written authorization. Such return shall in no way affect the County's discount privileges or exclude any other legal, equitable or contractual remedies the County may have therefore. Performance of services shall be completed to the County's satisfaction.

10. Warranty

The seller expressly warrants that all goods and work covered by this contract will conform to each and every specification, drawing, sample or other description which is furnished to or is adopted by the County and that they will be fit and sufficient for the purpose intended, merchantable, of good material and workmanship, and free from defect. Such warranty shall survive delivery and shall not be deemed waived either by reason of the County's acceptance of said goods or work or by payments for them.

11. Invoices

Invoices shall be submitted to address as noted on Purchase Order. Invoices shall contain the following information: purchase order number, item number, contract description of supplies or services, quantities, unit prices and extended totals. Delay in receiving invoices and errors in omissions on statements or invoices will be considered just cause for withholding settlement without losing privileges.

Terms and Conditions of Purchase

12. Notice and Service Thereof

Any notice to any contractor from the County relative to any part of this contract will be in writing and considered delivered and the service thereof complied when said notice is posted with said contractor or his authorized representative.

13. Acts of God

Neither party shall be liable for delays, or defaults in the performance of this contract due to Acts of God or the public enemy, riots, strikes, fires, explosions, accidents, governmental action of any kind or any other causes of similar character beyond their control and without their fault or negligence.

14. Patents

The seller guarantees that the articles described herein and the sale or use of them will not infringe upon any U.S. or foreign patent. The seller covenants that he will, at his own expense, defend every suit which may be brought against the County, or those selling or using the County's product (provided seller is promptly notified of such suit and all papers therein are delivered to the seller) for any alleged infringement of any patent by reason of the sale or use of such articles and seller agrees that he will pay all costs, damages and profits recovered in any such suit.

15. Bankruptcy or Insolvency

In the event of any voluntary or involuntary proceedings by or against either party in bankruptcy or insolvency, or for the appointment of a receiver, trustee or an assignee for the benefit of creditors of the property of seller, or in the event of breach of any of the terms hereof including the warranties of the seller, the County may cancel this contract or affirm the contract and hold the seller responsible for damages.

16. Public Notice – Title VI of the 1964 Civil Rights Act

"No person in the United States shall, on the ground of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

Anyone who believes that an agency or local government receiving federal financial assistance has discriminated against someone on the basis of race, color, or national origin has a right to file a complaint within 180 days of the alleged discrimination. Inquiries and charges of violations concerning Title VI should be directed to the Human Resource Director of Monroe County.

17. Non-Conflict

No employee, officer or agent of The County shall participate in the selection, or award of, or administration of a contract if a conflict of interest, real or apparent, would be involved.

18. Provisions Required by Law Deemed Inserted

Each and every provision of law and clause required by law to be inserted in this contract will be deemed to be inserted herein and the contract will be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon application of either party the contract will forthwith be physically amended to make such assertion or correction.

19. Termination of Contract

The County reserves the right to terminate the contract at any time if any of the provisions of the contract are violated by the contractor or by any of his subcontractors, in the sole judgement and discretion of the Purchasing Agent. In the event of such termination, the Contractor shall be liable for any excess cost incurred by County. If the contract is so terminated the County may purchase, upon such terms and in such manner as the County Purchasing Agent may deem appropriate, supplies, goods, or services similar to those so terminated and the Contractor will be liable for excess cost occasioned thereby. In the event the contract is terminated by the County for due cause, the vendor may be barred from bidding on County contracts for a period of 12 months.

20. The Contractor/Vendor/Supplier may be cancelled without cause by either party with the giving of written notice of no less than 60 calendar days.

Overview

Monroe County Board of Education is looking procure a contract for the needs of the playgrounds at the schools. These needs include but are not limited to: purchasing, installation, maintenance, and repairs to all parts of the playgrounds including new playground equipment, borders, fall surfacing materials, ground work, etc.

Requirements

In order to bid you must:

- Be CPSI Certified and provide a copy of your certification.
- Follow all the rules and regulations of ASTM and CPSC
- Attend the Pre-bid Meeting
- Provide a copy of your business license

Contact Information

Any questions or request for clarifications must be submitted by email to jessi.soileau@monroetn.com no later than 4:00PM on 7/6/2020. No questions or request for clarification will be answered after the above listed date and time. Telephone and fax questions will not be answered.

Terms of Contract

The contract period shall be for one (1) year commencing July 9, 2020 through June 30, 2021. The contract may be renewed annually for three (3) additional years in twelve (12) month increments, if agreeable to both parties and reduced to written form.

Bidder agrees that other government agencies and schools may piggyback from this bid.

Monroe County reserves the right, when the interest of the County so requires, to terminate this bid/contract in whole or in part for the convenience of the County. Notification of termination must be in writing (certified mail), issued by the Department of Finance.

Award

The contract award, if made, will be to the vendor(s) whose bid meets the specifications and conditions set forth, and whose bid is most advantageous to the County. Price shall be an evaluation factor as well as the qualifications and ability of the vendor(s) to perform the necessary work, and past performance history. Monroe County reserves the right to reject any and all bids submitted.

The successful vendor's bid content shall become a contractual obligation if procurement action ensues. Failure of the successful vendor to accept these obligations in a contractual agreement may result in cancellation of the award.

Monroe County reserves the right to incorporate standard county provisions into any contract negotiated as a result of any bid submitted in response to the bid.

The vendor shall not engage the services of any person employed by Monroe County Government, including any department, commission, or board thereof without written consent of the County.

This bid may be awarded to multiple vendors.

Delivery

Vendor is responsible for all freight and items until delivered.

Invoicing

Invoices must contain date and location supplies were delivered and the purchase order number for that particular order. Invoices will be paid within thirty (30) days once received. **The vendor is not to fulfill any orders for the County without a purchase order in place.**

Response Submission

In order to facilitate the bid evaluation process, one (1) original and one (1) exact copy of the bid must be submitted to the Purchasing Department. All bids must be packaged, sealed, and show the following information on the outside of the package:

Company's Name and Address

Bid Number and Title and Bid Due Date and Time

Submit to:

Monroe County Finance Department

Attn: Jessi Soileau

103 College Street South, Ste. 9

Madisonville, TN 37354

Mandatory Pre-Bid Meeting

Mandatory pre-bid meeting will be on June 30, 2020 at 9:00 AM at Vonore Elementary School, 1135 Highway 411, Vonore, TN 37885. Contractor is required to be at the meeting in order to bid on this project

MUST BE SUBMITTED IN BID PACKET

1. One original and one exact copy of bid document
2. Completed W-9
3. Three (3) references
4. Completed responses to litigation information
5. Copy of CPSI Certification
6. Copy of Business License

REFERENCES

Please provide three school references within the state of Tennessee for whom the company has provided similar equipment and services in the past three years. (If school references are not available please provide three business references.)

Name: _____ Phone Number: _____
Address: _____
Type of Equipment: _____
Time Services where Provided: _____

Name: _____ Phone Number: _____
Address: _____
Type of Equipment: _____
Time Services where Provided: _____

Name: _____ Phone Number: _____
Address: _____
Type of Equipment: _____
Time Services where Provided: _____

LITIGATIONS

Please state if your company has been a party to any litigations in the past five years. If so, please identify the name of the case, the court in which it was filed or is pending, and the status and/or disposition of the case if it has been concluded.

NO _____
YES _____

Name of Case (include case or docket number): _____

Court in which case is/was filed: _____

Description of claims that are subject to any litigations: _____

Decision/Verdict of case if concluded: _____

Price

Provide percentage discount offered to Monroe County Schools from MSRP pricing to purchase playground equipment.

\$ _____

Provide percentage discount offered to Monroe County Schools from MSRP pricing to install playground equipment.

\$ _____

Provide a unit price for the purchase and delivery of playground borders to any Monroe County Schools facility. (Price per standard 4' section).

\$ _____

Provide a unit price for the Installation of playground borders to any Monroe County Schools facility. (Price per standard 4' section).

\$ _____

Provide a unit price for the purchase and delivery of gravel drainage fill to any Monroe County Schools facility. (Price per cubic yard).

\$ _____

Provide a unit price for the Installation of gravel drainage fill. (Price per cubic yard). Note: Installation price shall include necessary equipment and transporting material up to 100 yards where necessary.

\$ _____

Provide a unit price for the purchase and delivery of playground certified wood chips material to any Monroe County Schools facility. Must include certification letter (Price per cubic yard).

\$ _____

Provide a unit price for the Installation of playground certified wood chips surface material. Must include certification letter. (Price per cubic yard). Note: Installation price shall include necessary equipment and transporting material up to 100 yards where necessary.

\$ _____

Provide a unit price for the purchase, delivery and installation of surface mats to any Monroe County Schools facility. (Price each).

\$ _____

Provide regular hourly labor costs to provide supervisory personnel for equipment/border and/or protective surface Installation.

\$ _____

Provide overtime hourly labor costs to provide supervisory personnel for equipment/border and/or protective surface installation.

\$ _____

Provide regular hourly labor costs to provide laborers for equipment/misc. equipment. i.e. swing chain, hooks, hangers, clevis, etc./border and/or protective surface Installation.

\$ _____

Provide overtime hourly labor costs to provide laborers for equipment/border and/or protective surface installation.

\$ _____

Trip Surcharge?

Yes or No Cost \$ _____

Fuel Fee?

Yes or No Cost \$ _____

When does time start for hourly rate?

INDIVIDUAL & TOTAL PROJECT COST PREPARATION

Contractor is to prepare and submit a written quotation to provide a turn-key project for all schools listed and each individual location listed for the necessary repairs/improvements per the CPSI report which is attached. The quotation shall include all cost required to provide a complete and full installation at each given location. The pricing shall include but not be limited to the cost of design, permits, labor, materials, a detailed description of the scope of work, inspection services, and any required subcontracted services. The quotation shall remain firm for ninety (90) days from the date of receipt by Monroe County Schools. All estimation and quotation preparation shall be provided at no cost or obligation to Monroe County Schools. The contractor shall be responsible for setting and establishing the correct use and circulation zones in compliance with ASTM Standards, CPSC Guidelines and best practice management practices. (Please see attached inspection report.) Once these projects are completed, they must meet CPSI guidelines and make sure that all requirements outlined in the recent inspection report (which is attached) have been addressed and are completed. If not, it will be up to the contractor to do what is necessary to continue to make the necessary changes/improvements at no cost to the county schools until the playgrounds are code compliant.

Please use this extra space to give us any additional information you feel necessary.

Playground Sites:

1. Coker Creek Elementary
130 Ruritan Rd
Tellico Plains, TN 37385

2. Rural Vale Elementary
395 Daughtery Springs Rd
Tellico Plains, TN 37385

3. Tellico Plains Elementary and Tellico Plains Junior High
120 & 121 Old High School Rd
Tellico Plains, Tn 37385

4. Madisonville Primary School
268 Warren St.
Madisonville, Tn 37354

5. Madisonville Intermediate School
1000 Green Rd
Madisonville, Tn 37354

6. Vonore Elementary School
1135 Highway 411
Vonore, TN 37885

VENDOR INFORMATION

Please print or type clearly. Complete each section entirely and verify for accuracy.

Company Name:		
Mailing Address:		
City:	State:	Zip Code:
Contact Person:		
Phone Number(s):	Fax Number:	
Alt. Phone Number(s):	Cell Phone Number(s):	
Email address:		
Remit To Address (if different from above):		
City:	State:	Zip Code:
Accounts Receivable Contact Person:		
Phone Number(s):	Fax Number:	
Alt. Phone Number(s):	Cell Phone Number(s):	
Email address:		
Number of years in business:		
Business License Number:		State:

BIDDER INFORMATION:

Name of Bidder:

(Typed or Printed: Firm, Corporation, Business or Individual)

Business Address:

Business has been in business under its present name since: _____

At this present time we understand all requirements and state that as a serious bidder we will comply with all the stipulations included in this package.

The above named bidder affirms and declares:

1. That the bidder is of lawful age and that no other person, firm or corporation has any interest in this Bid/Proposal or in the contract proposed to be entered into.
2. That this Bid/Proposal is made without any understanding, agreement, or connection with any other person, firm or corporation making a proposal for the same purpose, and is in all respects fair and without collusion or fraud.
3. That the bidder is not in arrears to Monroe County upon debt or contract and not a defaulter, as surety or otherwise, upon any obligation to Monroe County.
4. That no officer or employee whose salary is payable in whole or in part from the County Treasury shall be or become interested, directly or indirectly, surety or otherwise in this proposal, in the performance of the Contract, in the supplies, materials, equipment and work or labor to which they relate, or in any portion of the profits thereof.

BIDDER: _____

BY: _____

(Authorized Signature in Ink)

PRINTED NAME OF SIGNER: _____

TITLE OF SIGNER: _____

DATE SIGNED: _____

PHONE NUMBER OF SIGNER: _____

ALL VENDORS MUST SUBMIT A W-9 FORM WITH THEIR BID RESPONSE.

Playground Facility Assessment

Madison County, Tennessee, Board of Education

Submitted: February 7, 2020

**Inspections and Report by
Park Services, LLC
Chattanooga, Tennessee**

Doug Ehman, Principal

Doug Ehman 2.7.2020

Introduction and Locations Inspected

This report is the result of inspections of playground equipment on sites managed by the Monroe County Tennessee Board of Education located at 205 Oak Grove Road, Madisonville, TN 37354 and were performed by Doug Ehman, Certified Playground Safety Inspector (#43089-10210, Attachment 1) and Principal, Park Services, LLC, 4605 Tennessee Avenue, Chattanooga, Tennessee, 37409.

Sites inspected were:

A. Coker Creek Elementary School
130 Ruritan Road
Tellico Plains, TN 37385

B. Rural Vale Elementary School
395 Daugherty Springs Road
Tellico Plains, TN 37385

C. Tellico Plains Elementary School
121 Old High School Road
Tellico Plains, TN 37385

D. Tellico Plains Junior High School
120 Old High School Road
Tellico Plains, TN 37385

E. Madisonville Primary School
268 Warren Street
Madisonville, TN 37354

F. Madisonville Intermediate School
1000 Green Road
Madisonville, TN 37354

G. Vonore Elementary School
1135 Highway 411
Vonore, TN 37885

Method Utilized

Inspections were governed by relevant ASTM standards (ASTM F1487-17 Playground Equipment, ASTM F1292-17 Impact Attenuation of Playground Surfaces, ASTM F2049-11 Fences/Barriers for Outdoor Play Areas and others as applicable) and the Consumer Product Safety Commission (CPSC) publication "Public Playground Safety Handbook", 2010 revision.

There are three broad areas of liability with playgrounds. These are the design and manufacture; original installation; and maintenance of the equipment and their associated support systems such as surfacing and fencing. Inspection and maintenance of playground systems is a multi-tiered process that

can require certification and extensive experience.

An audit is the most technically complex and labor intensive inspection of playground equipment and its' companion systems such as surfacing and fencing. It must be performed by a Certified Playground Safety Inspector (CPSI) utilizing the appropriate ASTM standards and CPSC guidelines and best management practices (BMP) dictate that it should be performed upon completion of the original equipment installation. The audit identifies equipment that is on the playground, their current condition and how they measure up to ASTM F1487 specifications and CPSC guidelines. It does the same for surfacing, fencing and other companion systems. The audit is normally a one time event and forms the basis for development of a maintenance master plan and notes any deficiencies, repairs or other such modifications that need to be performed. It is only repeated upon modification of the original structure through removal, modification or addition of equipment. The audit is a painstakingly technical and detailed process which takes considerable time to perform and document and will set the baseline for future inspection, maintenance, repair and replacement activity. If no audit is performed at the time of installation it should be performed at a future date, even if several years hence, to establish this critical maintenance and repair baseline, and ensuring the equipment, surfacing and site are compliant with current standards and guidelines. Because of the thoroughness and depth of evaluation defects will be identified in the audit process that would not be otherwise found.

At the other end of the inspection spectrum is the high frequency or "daily" inspection. Most high frequency inspections are performed by site staff, or in the absence of site staff, those who are routinely onsite to perform other tasks such as custodial or landscape maintenance duties, and have been trained by a CPSI whenever possible. They are looking at basics such as the need to remove litter or reposition surfacing material into high traffic areas and may perform simple maintenance and repair tasks while onsite. High frequency inspections ensure that there is no damaged, broken or vandalized equipment with deficiencies being noted and the CPSI being informed of any issues as soon as possible.

Falling In between these two inspections in complexity is the low frequency, at times called "monthly" or "quarterly", inspection. It is generally accepted, that this level of inspection, as a best management practice, should be performed by a CPSI. A CPSI has demonstrated the technical skill and ability to take the information from the high frequency reports, meld it with the technical specifications of the audit and perform a detailed inspection that focuses on potential or current maintenance issues, the need for replacement or upgrade, changes in the ASTM standards or CPSC guidelines since the original audit or user identified issues that have emerged. Frequency of this inspection is driven by the level of use with high use equipment located at schools or very popular parks being performed at least monthly and lower traffic sites on a less frequent basis.

All Monroe County Board of Education inspections were performed utilizing a low frequency maintenance inspection protocol (Attachment 2) with the following exceptions:

A. Surfacing inspections within use zones shall be performed utilizing using audit protocols due to the high potential for severe class 1 and 2 injuries and the fact that almost ¾'s of all playground injuries are from falls (Attachment 3).

B. Regardless of protocol utilized any class 1 hazards found were flagged to the owner's representative, Phillip Carroll, Maintenance Director.

Hazard Descriptions

The intent of the ASTM standards and the Consumer Product Safety Commission Federal guidelines is to reduce the number and severity of life threatening and seriously debilitating injuries. In an effort to assign the potential severity for injury when a defect is found a system of ranking deficiencies has been developed. This system is based on: 1) the *possibility* that a user could come in contact with the hazard; 2) the likelihood or *probability* that a child might have an accident as a result of the exposure to the defect; and 3) the most likely *consequence* of the accident or would the outcome be a major or minor injury. The hazard identification system utilized as a best management practice (BMP) by inspectors is:

Class 1: Life Threatening or Permanent Disability

This condition should be corrected immediately

Examples would include permanent paralysis or compromise in physical function and/or loss of cognitive function; death; amputation of any body part including but not limited to toes or fingers, hands, feet, arms or legs; permanent blindness or loss of hearing or speech; crushing of fingers or toes.

Class 2: Serious, temporary or non-disabling injury.

Condition should be corrected as soon as possible

Examples would include temporary paralysis or numbness and/or loss of cognitive function; crush of any body part corrected and restored by medical intervention including but not limited to toes or fingers, hands or feet; temporary blindness, loss of hearing or speech; concussion; broken bones; second and third degree burns; cuts or abrasions requiring medical intervention such as removal of debris, stitches, stapling, gluing or skin grafts to heal.

Class 3: Slight injury (non-disabling) or may not have caused injury but does not meet ASTM 1492 or CPSC Handbook for Public Playground Safety criteria

Condition should be corrected when time permits

Examples would include minor cuts or abrasions requiring no or limited medical intervention and reddening of the skin and/or minor bruising; sprains and bruising

Defects when found and noted will be assigned a hazard class based on the probability, possibility and consequence of the defect.

Means and Method of Equipment Repair

It is a Best Management Practice (BMP) that when making repairs or essential modifications to equipment the first call for guidance, means and method and replacement parts must be made to the equipment manufacturer or their representative. Manufactures have the responsibility (ASTM F1487-17 Sec13.1 & 11.1) and experience to provide critical support in this type of effort. If necessary you may consult with others such as well qualified and experienced individuals, installers or third party vendors but they should be contacted only after all efforts to secure the guidance and parts required from the original equipment manufacturers (OEM) are completed. In the instance where the OEM is unknown you may go to well qualified and experienced individuals, installers or third party vendors after all efforts to determine the OEM have been exhausted. The sole exception to this process is swing hardware where its interchangeable nature and lack of uniqueness in standard sling and bucket to-fro

Monroe County (TN) Board of Education-Assessment of Playground Facilities

Park Services, LLC, Chattanooga, Tennessee February 7, 2020

Page 4 of 32

swing configurations may make more sense to standardize on a specific supplier or manufacturer of swing and bucket seats, attachment hardware and chain for ease of purchasing and maintenance and repair activity. Even then such hardware and equipment must be compliant with applicable ASTM and CPSC criteria.

Findings Common to All Sites

- 1) All sites failed to have requisite warning signs and equipment stickers (ASTM F1487-17 Sec14). Class 1 hazard.
- 2) All sites failed in the audit of fall surfacing material (ASTM F1292-17 & CPSC Handbook Sec. 2.4). Most equipment had either an absence of compliant fall surfacing material or the material present had been contaminated to the point of being non-compliant. Exceptions were the equipment next to Tellico Plains Junior High School which could be brought into compliance by the addition of 3" of the same material which is onsite and repairs under the set of swings by the entry point. Class 1 hazard.
- 3) An exceptional number, nearly all, swing units had deficient use zones in to-fro swing zones (ASTM F1487-17 Sec. 9.4.1.1). Class 1 hazard.
- 4) All swing unit "S" hooks failed the 0.04" gap test for entanglement and/or other "S" hook specific requirements (ASTM F1487-17 Sec. 6.4.5 & Sec 6.4.5.1) . Class 1 & 2 hazards.
- 5) Many swing unit attachment points and hangers showed wear and were rusted. *Warning:* Potential Class 1 Hazard for failure (ASTM F1487-17 Sec. 3.1.53).
- 6) Excess swing chain has been left to hang at the hanger point of attachment on swings and are an entanglement. (ASTM F1487-17 Sec. 6.6.2.3) Class 1 hazard.
- 7) Housekeeping (ASTM F1487-17 Sec13.1.2 & 13.2.2).
- 8) CPSI/staff training & maintenance method
- 9) Lack of documentation and history (ASTM F1487-17 Sec13.3; CPSC Handbook Sec. 4.4)

Common Findings Discussion

Warning signs and stickers

None of the seven locations evaluated had the requisite warning signs and there were few equipment specific warning labels and those that were present were either only partially legible or totally illegible. ASTM 1492-17 section 14 addresses the requirement and specifies both content and location (ASTM 1492-17 Sec 14.1- 14.1.3) . In part the information conveyed includes but is not limited to age appropriateness of equipment (provided by manufacturer, ASTM 1492-17 Sec 14.2.1), supervision recommendations (ASTM 1492-17 Sec 14.2.2) and warning messages communicating the need to remove helmets, drawstrings or accessories from around the neck (ASTM 1492-17 Sec 14.2.3); hot play surfaces and/or surfacing (ASTM 1492-17 Sec 14.2.4); and the hazard of play equipment located

over hard surfaces (ASTM 1492-17 Sec 14.2.5). Signs and labels can purchased directly from playground equipment manufacturers and suppliers. Care must be taken to make sure ASTM specifications are met. By default the absence of warning signs is a class 1 hazard.

Recommendation: Contact manufacturers for appropriate signs and stickers; secure and install same as recommended (ASTM F1487-17 Sec14.1 & 14.2). Where manufacturers are unknown utilize compliant signs and stickers from others. At minimum school sites will typically require one warning sign at each point of entry if fenced. Where the site is open 2-3 signs would be required based on parking and access. All equipment, both composite and free standing structures, must have individual warning stickers/labels on primary support legs/structures visible from all sides (ASTM F1487-17 Sec14.1.2). Extra signs and stickers should be ordered due to vandalism and theft. Signs should be attached using tamper proof hardware. If freestanding signs are installed they shall be located outside all equipment use zones (ASTM F1487-17 Sec14.1.3)

Timing: Immediate

Fall surfacing and use zones

All sites failed in the audit of fall surfacing material. Most had either a total absence of compliant fall surfacing material, an exceptionally thin covering of material or the material present had been contaminated to the point of being non-compliant. Exceptions were the equipment next to Tellico Plains Junior High School which could be brought into compliance by the addition of 3" of the same material (filling to the top of edge barriers) which is on the site after repairs under the set of swings by the entry point. The absence or presence of insufficient surfacing material to meet fall height criteria is a class 1 hazard.

Standards and guidelines require that specific use zones be delineated for all equipment (ASTM F1487-17 Sec 9.1). The purpose of these zones is to provide an area free of hazards so that children may play safely and circulate. For most equipment the use zone extends a distance of 6 feet horizontally from the perimeter of the structure and includes the space under the equipment (ASTM F1487-17 Sec 9.2.1). There are exceptions to this rule and one exception is with the to-fro area of swings; that is the area that the swings cover when they go back and forth. In the case of to-fro swings the area which must be kept clear is equal to twice the distance from the top of the chain to the surfacing (ASTM F1487-17 Sec 9.4.1.1)(see Attachment 4). If the distance from the top of the chain to the surfacing is 8 feet then 16' to ***both the front and the rear*** must be kept clear of hazards which results in a significant use zone for swing units. Over 80% of the swing units inspected were found to be non-compliant for use zones. This is a class 1 hazard.

Recommendations: Resolve the issues of surfacing and use zones concurrently. Reestablish proper use zones at each location based on the equipment present and in service. Set new site boundaries based on these new use zones and circulation requirements (ASTM F1487-17 Sec 9.2.1 & Sec 9.8). Cleanup the areas within the new site boundaries and install new, on-grade, 12" tall black (nominally, other colors may be available) plastic (UV inhibited) interlocking boundary curbing along with one or more point of access unit for ADA access. Install and pin ground cloth within this area after surface clean up and back-fill with virgin wood chips or engineered wood fiber (EWF) certified as playground surfacing material. This material is commonly available, reasonably priced, drains well and will develop an ADA

compliant access way if properly managed. Over fill by 10% especially in high use zones such as under swings, slide exits, entry points and equipment points of access. Care will need to be taken to provide the correct height for slide exits (ASTM F1487-17 Sec 8.5.5). This may require partial excavation of the site when establishing the new surface elevations. Additionally, as the sites need to be renewed by the addition of more material as the result of settling and wear you must use the same material originally utilized. You cannot mix virgin wood chips with EWF, one will compromise the other, the surfacing will be contaminated and you compromise and lose, all or in part, the fall attenuation you seek to have and create a non-compliant surface.

Strong consideration should be given to the use of wear mats to maintain the integrity of the surfacing material and reduce maintenance and housekeeping efforts. Mats need to be installed ABOVE the correct amount of surfacing and swings will need to be adjusted UP to account for the mat's thickness. For example, if the mat is 1" thick then the swing should be raised 1" after installation of mats in order to maintain the proper height above the surfacing. If a 2" mat is used you would raise the swing 2" in order to have the proper clearance. Experience and BMP would dictate that you should purchase the thickest mat with the largest footprint possible. For example, Discount Playground Supply, who is but one of many sources for these mats, sells a 32"x54"x2" mat that weighs 80 pounds and has beveled edges and is comparable to mats this inspector has used successfully in the past. These mats, when installed properly, stay in place and will come close to totally eliminating mulch kick out at high traffic, intensively used areas such as under swings and at the end of slides. While seemingly expensive at \$92.00 each agencies save more than that in the first month by reducing the labor costs associated with the raking of surfacing material back into high traffic areas. Additionally, mats such as these assist in meeting ADA regulations for accessibility.

Timing:

- Immediately begin the process of determining appropriate equipment use zone and site boundaries (60 days to complete all sites).
- Immediately begin the process of estimating curbing needs, secure source and have contract in place (45 days) then order estimated curbing units for first two projects (over order on quantity, you can always use them on the next project). Cleanup, install curbing and ground cloth (15 days), order surfacing and install (3days) cleanup (1). Line the next two locations up and begin work.
- Immediately begin the process of estimating fall surface needs, secure source and have contract in place (45 days)
- Immediately begin to estimate ground cloth needs, secure source and have contract in place (45 days).
- Secure dump site for spoils from cleanup (45 days)

Swing hardware and seats

As each playground area has appropriate use zones and site boundaries established, curbing installed and back filled with fall surfacing, swing units need to be evaluated for replacement of hanging and point of connection equipment, chain and swing seats. There are a few support structures that need to have pipes evaluated for structural integrity and they are noted in the site specific comments. Additionally, at almost all sites excess swing chain that has been left hanging at the hanger attachment

and needs to be trimmed to 7" or less in length.

Recommendations: The prototypical/ideal set up for swing hardware, other than the excessive surplus chain found hanging, can be found at Madisonville Primary School in the preschool area on the tall, blue two bay swing just inside the gate. That unit has quality pipe hanger clamps, an "H" hanger on the clamp, "C"-clevis' on each end of the chain, at both the clamp and the seat and an intact seat on the bottom. All swing units should, ideally, look like this in terms of hardware configuration. Virtually all "S" hooks evaluated failed and will need to be replaced. "C"-clevis attachment installation is much easier to perform and maintain than "S" hooks and is also less susceptible to damage and wear. While replacing these failed "S" hooks it would make sense to replace other rusted and worn components including chain, other attachment equipment, hangers and seats. All hardware must be specific for swing use in order to be compliant. There is a need to verify that the bright replacement swing chain and hardware that has been used is rated for swing use. If not so rated, it does not have the physical attributes that are expected of swing use rated materials. There are several options available for the purchase of both hardware and mats. A common practice is to purchase mats and swing hardware directly from playground manufactures. Independent suppliers such as Discount Playground Supply also offer a wide range of options, reasonable volume discounts and products that are certified for playground use.

Another item, applicable to all sites where this condition is present, is regarding the point of attachment for swing chain at the hanger. Several swing units, in multiple locations, have the C-clevis at the seat but hang chain directly from the hanger assembly pin. While not a violation of ASTM standards or the CPSC Handbook guidelines such an attachment method is not considered a best management practice (BMP). Swing chain will wear quickly in such an application and BMP would mandate that hardware specifically designed for the application: the attachment and rotation point for swings, be utilized. While S hooks are designed and utilized for that application their use is fraught with installation and maintenance issues. The best option for use in the attachment of swing chain to hanger assemblies is a C-clevis, the same hardware as utilized at the seat connection. It would be my strong recommendation that wherever swing chain is directly connected to hanger assemblies that C-clevis be inserted between the swing chain and hanger assembly.

At virtually all sites excess swing chain has been left to hang at the hanger point of attachment. If this excess length is more than 7", in most cases seven links of chain, it is non-compliant with ASTM F1487-17 Sec. 6.6.2.3 and an entanglement and a class 1 hazard. As such excess chain length is encountered they need to be trimmed back to a complaint length.

Timing: Over next 60 days, as qualified staff visit the various sites, do an inventory of how many new hangers, clamps, c-clevis, feet of swing chain and seats you will need. Order 10% over for repair inventory. Replacement by qualified staff can begin once all components have been received and new use areas and surfacing material has been installed. New sling swing seats should be set 12-13" above the new surface elevation for kindergartners (ages 4-6), 14-15" above for 1-3 graders (ages 7-9) and 16"-17" for those age 10 and above. Toddler bucket seats should be set a minimum of 24" above the surface with 30-36" above the surface being common practice. All seat heights must be set and measured with a simulated user load in place (ASTM F1487-17 Sec 8.6.5.1(1)). This is defined as a 120 pound load with a simulated 13.1 inch hip breadth (ASTM F1487-17 Sec 8.6.5.1(1)).

Housekeeping

Housekeeping is a general term that refers to the condition of the playground areas on a daily basis and is composed of two broad areas. The first is the collection and removal of trash or litter from the playground areas and in this the individual school sites and the community is to be commended as there was little if any trash or litter found at any site. This is even the more remarkable since all the sites, except one, are available for general public use when school is not in session.

The second form of housekeeping is the regular and systematic technical check of the surfacing and equipment (ASTM F1487-17 Sec. 13). Such an inspection would be conducted by trained staff utilizing a standardized check list (Appendix 5) which would serve to document the activity. After a copy was made for local site records the completed form would then be transferred to the individual responsible for records retention. Based on casual conversations with staff these technical checks are not occurring. This will be discussed more thoroughly in the next section: **CPSI/staff training & maintenance method and Lack of documentation and history**

CPSI/staff training & maintenance method and Lack of documentation and history

The ASTM standard in 1487-17 Section 13 is most emphatic in the requirement of the owner to periodically inspect (ASTM 1487-17 Sec. 13.1.2) and "shall maintain and repair each play structure" (ASTM 1487-17 Sec. 13.1.1) and speaks specifically to the need to "periodically" inspect and repair the impact attenuating surface (ASTM 1487-17 Sec. 13.2) and for the need to "establish and maintain detailed installation, assembly, inspection, maintenance and repair records" (ASTM 1487-17 Sec. 13.3 & Sec. 5.1). The CPSC Handbook in Section 4.4 indicates:

"Records of all maintenance inspections and repairs should be retained, including the manufacture's maintenance instructions and any checklists used. When any inspection is performed, the person performing it should sign and date the form used. A record of any accident should also be retained. This will help identify potential hazards or dangerous design features that should be corrected"

The need to have a systematic and comprehensive method of inspection, maintenance and repair for playgrounds is not only a best management practice but a requirement of the two guiding documents, ASTM F1487-17 and the Consumer Product Safety Commission (CPSC) publication "**Public Playground Safety Handbook**", 2010 revision. There is no evidence of any such method being in place and that was verified in casual conversations with staff. This is highly regrettable as it is not only contrary to ASTM standards and Federal guidelines it also provides the Board of Education with no credible documentation that could support any claims of maintenance or repair activity if there was ever a need to prove such activity. The current process is also reactive rather than proactive and relies on the reporting of defects by untrained site staff to the central maintenance office where additional untrained staff are dispatched to make repairs as best they can. This is, unfortunately, all too common a practice in many agencies and organizations but can be easily resolved.

Steps for the establishment of a successful playground inspection, maintenance and repair program:

- **Action to be taken:** Identify individuals, ideally a minimum of 2, that have an interest in playgrounds.
Timing: Immediate

Monroe County (TN) Board of Education-Assessment of Playground Facilities
Park Services, LLC, Chattanooga, Tennessee February 7, 2020

- **Action to be taken:** If no individuals are available contract with a CPSI in order to gain temporary expertise; take vacant positions or create positions that may be available and make playgrounds and CPSI a sizable component of the job responsibilities and hire accordingly.
Timing: Immediate or as opportunities to implement become available
- **Action to be taken:** Get individuals trained, tested and certified as CPSI. Incentivize this process if need be (IE. 5% bump in base salary for securing and retaining CPSI designation).
Timing: Immediate
- **Action to be taken:** Make playgrounds a priority within the Board of Education and in these individuals workload, releasing them from other responsibilities if need be in order to create the work capacity to properly deal with playgrounds.
Timing: Immediate with development and approval of policy statement.
- **Action to be taken:** Provide additional support from other staff and contractors as necessary to keep playgrounds safe and compliant.
Timing: Immediate and as necessary
- **Action to be taken:** Make the CPSI staff responsible and accountable for playground condition and compliance while giving them the authority over the subject area.
Timing: Once CPSI certification is secured.
- **Action to be taken:** Develop and implement site based high frequency inspection program with site based responsibility and accountability.
Timing: Immediately after at least 1 CPSI staff is onboard or implemented at very reasonable cost with consultant assistance if more timely implementation is desired.
- **Action to be taken:** Develop and implement centralized inspection, maintenance and repair program with CPSI's assistance
Timing: Immediately after at least 1 CPSI staff is onboard or implemented at very reasonable cost with consultant assistance if more timely implementation is desired.
- **Action to be taken:** Develop and implement centralized record keeping system using Best Management Practices.
Timing: Immediately after at least 1 CPSI staff is onboard or implemented at very reasonable cost with consultant assistance if more timely implementation is desired.
- **Action to be taken:** Develop and utilize a dedicated funding stream that can be rolled over from one budget year to another for maintenance and replacement activity. This fund can be used for repair and maintenance material and equipment including added surfacing as necessary and be accrued to replace smaller units and components as they reach the end of their service life.

Timing: Begin immediately as an added component of the FY 21 budget process. Immediately beginning to identify current and additional funding needs on an annual basis for possible consideration in FY 21 operating and capital budgets with the intent to have full submittals for FY 22 budget cycle.

- **Action to be taken:** Develop and utilize a dedicated funding stream that can be rolled over from one budget year to another for for large capital playground item replacement. This fund can be used for larger equipment replacement and supplement the smaller account when necessary for large repair and maintenance activities such as multiple site surfacing replacement as these systems reach the end of their service life.

Timing: Begin immediately as an added component of the FY 21 budget process. Immediately beginning to identify current and additional funding needs on an annual basis for possible consideration in FY 21 operating and capital budgets with the intent to have full submittals for FY 22 budget cycle.

Operational Considerations and Summary

There are three broad issues that are, without a doubt, at the top of the list for resolution. These are the: 1) the lack of site signage and warning labels; 2) the lack of any compliant fall attenuation surfacing and insufficient and non-compliant use zones at all sites and; 3) the lack of in house or contracted expertise to inspect, repair and maintain the playgrounds coupled with an absence of inspection and record retention processes to support these activities. The issue of surfacing and use zones, just like the lack of expertise, inspection process and records creation and retention, are irrevocably coupled and must be dealt with as a unit rather than individually. A deficiency in any one if these areas raises the specter of increased liability but when taken as a group the lack of compliance with established guidelines and standards is remarkable for its scale and potential adverse impact upon users, the Board of Education, its' staff and the citizens of Monroe County. While initially requiring an influx of funds and the an ongoing, but much smaller commitment of monies, these non-compliance issues are fairly easy to resolve. Once expertise is available, inspection and record keeping protocols are in place and the issues related to surfacing and use areas brought into compliance the issues regarding swings is universal and should also be brought into compliance. Further, site specific inspection and compliance notes follow.

A final observation would be that much of the playground equipment, while in good condition, is dated and is not compliant with current standards. While such deficiencies were readily seen by the trained eye only a few rose to the level of class 1 hazard as required for review by this contract and have been reported. There would be great benefit in soliciting a bids for the audit of all playground equipment on all sites to determine a comprehensive understanding of current condition and compliance. An audit is a considerably more detailed inspection process that looks at every possible component; bolt, gap, deck, panel, ground penetration and feature with greater detail that does a low frequency maintenance inspection, the method agreed to and utilized for this report. An audit will require considerably more hours onsite than does a low frequency inspection and the information will be correspondingly more comprehensive, detailed and complete and provide a very complete and comprehensive understanding of current playground site and equipment deficiencies and set that critical baseline for future maintenance and repair activities.

Coker Creek Elementary School

Overview: This playground features a Landscape Structures (Circa 2000, requires verification) composite play structure; two 2 bay swing units of indeterminate manufacture, age and origin; and two double faced (back to back) foot & hand hold climbing boards of indeterminate manufacture, age and origin. It is surrounded by a 6' tall chain link fence creating a compound which includes a basketball court and has one pedestrian and one maintenance access point. Gates are not self closing and latching. It is located across an access drive from the school in a grove of primarily oak trees.

Defects Noted:

1. Absence of Warning Signs and Equipment Stickers (ASTM F1487-17 Sec14)-Class 1 Hazard
 - Please see discussion and recommendation on page 4 under **Common Findings**
Discussion: Warning signs and stickers.
2. Fall surfacing does not meet ASTM or CPSC criteria (ASTM F1292-17 & CPSC Handbook Sec. 2.4)-Class 1 Hazard. Field observations found 0-4" of wood chips in the use zones.
 - Please see discussion and recommendation on page 5 under **Common Findings**
Discussion: Fall surfacing and use zones.
3. Pine tree in rear of LH (as you enter) to-fro swing in use zone (ASTM F1487-17 Sec. 9.4.1.1 & 3.1.52.1) -Class 1 Hazard
 - **Action to be taken:** Remove Tree and cut or grind stump flush with grade not leaving trip hazard. Back fill with soil and grass seed as necessary.
 - **Timing:** Immediate
4. Steel swing frames require evaluation by structural engineer to determine serviceability and if serviceable determine and apply appropriate protective coating (IE paint etc.), ASTM F1487-17 Sec. 4.1.1)-**Warning:** Potential Class 1 Hazard for failure (ASTM F1487-17 Sec. 3.1.53).
 - **Action to be taken:** 1) Structural Evaluation by structural engineer; 2) If cleared for use application of protective coating consistent with ASTM F1487-17 Sec. 4.1.1; if not approved for use taken out of service immediately and removed. May be replaced subject to owners discretion and compliance with ASTM standards and CPSC Handbook guidelines.
 - **Timing:** Immediately begin evaluation process
5. All swing unit "S" hooks failed the 0.04" gap test for entanglement and/or other "S" hook specific requirements (ASTM F1487-17 Sec. 6.4.5 & Sec 6.4.5.1) . Class 1 & 2 hazards (Photo 1).
 - Please see discussion and recommendation on page 6 under **Common Findings**
Discussion: swing hardware and seats.
6. Both swing units had deficit in use zones (ASTM F1487-17 Sec. 9.4.1.1)-Class 1 Hazard
 - Please see discussion and recommendation on page 5 under **Common Findings**
Discussion: Fall surfacing and use zones.

7. Swing attachment and hanging hardware worn and rusty and/or have excessive surplus chain hanging at hanger attachment (ASTM F1487-17 Sec. 4.1.1 & Sec. 6.6.2.3) -*Warning: Potential Class 1 Hazard for failure or entanglement (ASTM F1487-17 Sec. 3.1.53).*
 - Please see discussion and recommendation on page 6 under Common Findings
Discussion: swing hardware and seats.
8. Swing seats worn, chipped or exposed metal straps (ASTM F1487-17 Sec. 6.2) -Class 2 Hazard
 - Please see discussion and recommendation on page 6 under Common Findings
Discussion: swing hardware and seats.
9. Wooden climbing boards do not have required use zones (ASTM F1487-17 Sec. 9.1.1 & Sec. 9.2.1) -Class 1 Hazard
 - Please see discussion and recommendation on page 5 under Common Findings
Discussion: Fall surfacing and use zones.
10. Wooden climbing board missing some hand and foot holds-BPM
 - Action to be taken: There are no “dead ends” and alternative routes where hand/foot holds are missing. BMP would dictate replacement of the missing hand/foot holds to avoid water infiltration into the wooden structure with resultant damage and to ensure all users are safe and have the full range of options. An intermittent step could be the installation of round headed screws/bolts into the existing open threaded anchors to minimize water infiltration.
 - Timing: Complete within 12 months since both climbing “dead ends” and alternative routes are available.
11. Wooden climbing board missing all hand and and foot holds-BPM
 - Action to be taken: Either reinstall the missing hand/foot holds after relocation to establish appropriate use zones or remove the unit.
 - Timing: Immediate for determination of action; relocation next 90 days; reinstall the missing hand/foot holds within a year.
12. Wooden climbing boards need paint-BPM
 - Action to be taken: Get unit(s) on schedule for maintenance painting using BMP.
 - Timing: As soon as practical once weather and BMP is factored in due to potential for water damage. There is considerable exposed wood.
13. Crush and shear on clatter bridge in Landscape Structures composite unit (ASTM 1487-17 Sec. 6.5 & the CPSC Handbook Sec. 3.1)-Class 1 Hazard (Photo 2)
 - Action to be taken: Contact manufacture immediately with photos showing crush & shear point, failed clatter bridge spacers and ask for repair instructions and implement same (ASTM 1487-17 Sec. 13.1.1) . The manufacture is required to provide same or fail ASTM 1487-17 Sec. 13.1.
 - Timing: Immediate

14. No documentation of origination, purchase, maintenance or inspection history of the equipment on the site or at Maintenance Division offices (ASTM 1487-17 Sec. 13.3, Sec. 5.1 & the CPSC Handbook Sec. 4.4). There is documentation onsite that appears to be regarding a repair to a slide in 2003 or 2004.
- Please see discussion and recommendation on page 7 under Common Findings Discussion: CPSU/staff training & maintenance method and Lack of documentation and history
15. Mold and mildew found on equipment-(BMP & ASTM 1487-17 Sec. 13.1.1)
- Action to be taken: Power washing using low pressure, a fan nozzle and plain water. This will need to be done at least annually and there may be a need to perform twice in the first year in order to get clean. This is a common problem in areas with tree canopy.
 - Timing: Completed prior to the beginning of 2020/2021 school year.
16. Many trees were found to have dead branches, some rather large, overhanging use zones, the access way and playground area. It did not appear any intruded into the 84" vertical clear zone above equipment but this should be rechecked once trees have fully leafed out and are growing. No "hangers" or totally dead trees were observed (ASTM 1487-17 Sec. 13.1.2).
- Action to be taken: Remove dead branches in playground area, recheck area once trees have fully leafed out and are growing.
 - Timing: Immediate, winter is perfect time for initial work. Recheck and followup work prior to the beginning of 2020/2021 school year.
17. All play structures and the composite play structure failed to have manufacturers identification (ASTM 1487-17 Sec. 15).
- Action to be taken: It is believed the composite structure is Landscape Structures. Pictures should be forwarded to the manufacturer for verification. Once verified inquire as to any information they may have regarding the equipment (operations and maintenance information, known problems and repairs, purchase history, etc.)
 - Timing: As time permits, to be complete within 6 months.
18. Bolts attaching tube to panel extend beyond the two thread limit (ASTM 1487-17 Sec. 6.4.3). By definition an entanglement thus Class 1 or 2 Hazard. (Photo 3)
- Action to be taken: 1) Bolts to be trimmed back to two thread limit and smoothed as necessary; 2) Composite structure to be surveyed for additional similar condition and remedied (beyond the scope of this contract, component of audit).
 - Timing: Prior to the beginning of 2020/2021 school year

THE BALANCE OF THIS PAGE LEFT INTENTIONALLY BLANK

Rural Vale Elementary School

Overview: This playground features a Playworld Systems composite structure (builders identification found). Playground equipment also found on this site include 3 multi-bay swing sets, 2 spring toys, two teeter totters, small composite structure, and a zip line. The playground can be accessed through an opening in the perimeter fence by following the sidewalk to the left of the main entrance or directly from the school via classrooms and hallways. There is a 6' perimeter chain link fence that ties back into the structure except for the open access as noted. There is a maintenance gate on the rear of the school and one of the gate panels have been removed by "mowing crews" per teaching staff and should be reinstalled.. There is no documentation or history to be found on any of the equipment.

Defects Noted:

1. Absence of Warning Signs and Equipment Stickers (ASTM F1487-17 Sec14)-Class 1 Hazard
 - Please see discussion and recommendation on page 4 under **Common Findings**
Discussion: Warning signs and stickers.
2. Fall surfacing does not meet ASTM or CPSC criteria (ASTM F1292-17 & CPSC Handbook Sec. 2.4)-Class 1 Hazard. Field observations found 0-2" of medium gravel in the use zones.
 - Please see discussion and recommendation on page 5 under **Common Findings**
Discussion: Fall surfacing and use zones.
3. The first swing unit encountered from the open access point had three swings in the first bay. ASTM F1487-17 Sec. 8.6.4.4 limits swing bays to two units. This is a Class 1 Hazard
 - **Action to be taken:** Remove the third swing and all hardware, including the hanger on the cross member.
 - **Timing:** Immediate
4. Steel swing frames require evaluation by structural engineer to determine serviceability and if serviceable determine and apply appropriate protective coating (IE paint etc., ASTM F1487-17 Sec. 4.1.1)-**Warning:** Potential Class 1 Hazard for failure (ASTM F1487-17 Sec. 3.1.53). (Photo 4)
 - **Action to be taken:** 1) Structural Evaluation by structural engineer; 2) If cleared for use application of protective coating consistent with ASTM F1487-17 Sec. 4.1.1; if not approved for use taken out of service immediately and removed. May be replaced subject to owners discretion and compliance with ASTM standards and CPSC Handbook guidelines.
 - **Timing:** Immediately begin evaluation process
5. All swing units "S" hooks failed the 0.04" gap test for entanglement and/or other "S" hook specific requirements (ASTM F1487-17 Sec. 6.4.5 & Sec 6.4.5.1) . Class 1 & 2 hazards.
 - Please see discussion and recommendation on page 6 under **Common Findings**
Discussion: swing hardware and seats.
6. All three swing units had deficit in use zones (ASTM F1487-17 Sec. 9.4.1.1)-Class 1 Hazard
 - Please see discussion and recommendation on page 5 under **Common Findings**

Discussion: Fall surfacing and use zones.

7. Swing attachment and hanging hardware worn and rusty and/or have excessive surplus chain hanging at hanger attachment (ASTM F1487-17 Sec. 4.1.1 & Sec. 6.6.2.3) -Warning: Potential Class 1 Hazard for failure or entanglement (ASTM F1487-17 Sec. 3.1.53). (Photos 5 & 6)

- Please see discussion and recommendation on page 6 under **Common Findings Discussion: swing hardware and seats.**

8. Swing seats worn, chipped or exposed metal straps (ASTM F1487-17 Sec. 6.2) -Class 2 Hazard (Photo 7)

- Please see discussion and recommendation on page 6 under **Common Findings Discussion: swing hardware and seats.**

9. Wooden swing unit was found to be split, rough and capable of issuing splinters. No evidence of rot was observed.-BMP

- **Action to be taken:** Sand wood removing potential for splinters or replace with new unit.
- **Timing:** Immediate

10. No documentation of origination, purchase, maintenance or inspection history of the equipment on the site or at Maintenance Division offices (ASTM 1487-17 Sec. 13.3, Sec. 5.1 & the CPSC Handbook Sec. 4.4).

- Please see discussion and recommendation on page 7 under **Common Findings Discussion: CPSI/staff training & maintenance method and Lack of documentation and history**

11. All play structures with the exception of the large composite play structure failed to have manufacturers identification (ASTM 1487-17 Sec. 15).

- **Action to be taken:** It is believed the composite structure is Landscape Structures. Pictures should be forwarded to the manufacturer for verification. Once verified inquire as to any information they may have regarding the equipment (operations and maintenance information, known problems and repairs, purchase history, etc.). Continue research to identify manufactures of other units
- **Timing:** As time permits, to be complete within 6 months.

12. Small composite structure is in poor condition with many prior repairs. Wood is badly rotted in spots, checked and split and, generally, at the end of it's service life. (Photo 8)

- **Action to be taken:** Remove and replacement with comparable unit if funding is available.
- **Timing:** Removal-Next 60 days. Replacement: As funding is available

13. Spring animals encroach on each others use zone (ASTM 1487-17 Sec. 9.1.1 & sec. 9.2.1)-Class 2 Hazard (Photo 9)

- **Action to be taken:** Relocate spring animals so that requisite 6' use zone is in place. Car must be taken to maintain appropriate distance from retaining wall and other equipment.

- **Timing:** Prior to 2020/2021 school year after issues with surfacing have been resolved.
14. Teeter totters are lacking shock absorbing material (ASTM 1487-17 Sec. 8.10.2)-Class 2 Hazard. (Photo 10)
- **Action to be taken:** Install shock absorbing material per referenced guideline
 - **Timing:** Prior to 2020/2021 school year
15. Picnic tables and chairs in the far to-fro swing use area (ASTM F1487-17 Sec. 9.4.1.1)-Class 1 Hazard (Photo 11)
- **Action to be taken:** Move tables and chairs out of use zone, preferably to side of playground area (towards building).
 - **Timing:** Immediate
16. Mold and mildew found on equipment-(BMP & ASTM 1487-17 Sec. 13.1.1) (Photo 12)
- **Action to be taken:** Power washing using low pressure, a fan nozzle and plain water. This will need to be done at least annually and there may be a need to perform twice in the first year in order to get clean. This is a common problem in areas with tree canopy.
 - **Timing:** Completed prior to the beginning of 2020/2021 school year.
17. Bolts attaching bubble to panel extend beyond the two thread limit (ASTM 1487-17 Sec. 6.4.3). By definition an entanglement thus Class 1 or 2 Hazard.
- **Action to be taken:** 1) Bolts to be trimmed back to two thread limit and smoothed as necessary; 2) Composite structure to be surveyed for additional similar condition and remedied (beyond the scope of this contract, component of audit).
 - **Timing:** Prior to the beginning of 2020/2021 school year

THE BALANCE OF THIS PAGE LEFT INTENTIONALLY BLANK

Tellico Plains Elementary School

Overview: This playground features a Landscape Structures (Circa 2000, requires verification) composite play structure; two 3 bay swing units; a zip line; a small 4 way teeter-totter unit and; a pipe "car unit" all of indeterminate manufacture, age and origin. It is surrounded by a 4' tall chain link fence creating a compound and has two pedestrian and one maintenance access point. One access point is from the school parking area, the other is near the interior parking/end of building hallway. There is also a maintenance gate. Gates are not self closing and latching. It is located in an interior space behind the building and the fenced area includes a large play field

There is a considerable issue at this location with drainage which currently transects the site. This site may greatly benefit from a reconfiguration of some of the equipment and/or curbing to resolve this issue and should be considered in the addressing of the use zone and site circulation issues.

Professional Judgment and Opinion: The limited surfacing which is currently onsite is shredded tires. It is largely absent from the site (Photo 13) with the exception of under the composite structure and even there it is largely deficient and does not meet fall attenuating criteria. In my experience, and in the experience of others I have consulted, shredded tire surfacing is problematic. It is easily moved by water, which accounts for the large quantities outside the curbing and it's location under the composite structure, the downhill side of the playground. It can be exceptionally dirty and mark skin and stain clothing and be difficult and costly to secure for maintenance replacement. It can, however; be an acceptable surfacing material in very specific and limited specific instances: in those cases where there are small areas utilized by small users (ages 2-5) and protected from the weather. This is not such a space. There is also a growing body of anecdotal and scientific evidence that would appear to categorize potential health considerations when recycled tire products are utilized in a sports or recreational environment. It is for these reasons I would recommend conversion of the fall attenuation surfacing at TPES to either a EWF or virgin wood chip material compliant with ASTM guideline for use as surfacing in playgrounds.

Defects Noted:

1. Absence of Warning Signs and Equipment Stickers (ASTM F1487-17 Sec14)-Class 1 Hazard
 - Please see discussion and recommendation on page 4 under **Common Findings Discussion; Warning signs and stickers.**
2. Fall surfacing does not meet ASTM or CPSC criteria (ASTM F1292-17 & CPSC Handbook Sec. 2.4)-Class 1 Hazard Sections of the black curbing material is damaged and will need to be replaced in conjunction with this activity. Field observations found 0-4" of shredded tires in the use zones. (Photo 13)
 - Please see discussion and recommendation on page 5 under **Common Findings Discussion; Fall surfacing and use zones.**
3. Crush and shear on clatter bridge in Landscape Structures composite unit (ASTM 1487-17 Sec. 6.5 & the CPSC Handbook Sec. 3.1)-Class 1 Hazard (Photo 14)
 - **Action to be taken:** Contact manufacture immediately with photos showing crush & shear point, failed clatter bridge spacers and ask for repair instructions and implement

same (ASTM 1487-17 Sec. 13.1.1) . The manufacture is required to provide same or fail ASTM 1487-17 Sec. 13.1.

- **Timing:** Immediate

4. There is an open platform on the composite structure with an elevation of 54.5" from its surface to the ground. The space requires a barrier (ASTM F1487-17 Sec. 7.5.6.1) and is a Class 1 Hazard (Photo 15)

- **Action to be taken:** Installation of barrier to eliminate hazard.
- **Timing:** Immediate

5. At the point of attachment for the overhead horizontal ladder at the composite structure one of the plastic caps has rotated creating an entanglement-(ASTM F1487-17 Sec. 6.4)-Class 1 Hazard (Photo 16)

- **Action to be taken:** Reinstall the cap to eliminate hazard.
- **Timing:** Immediate

6. At the pedestrian access from the primary TPES parking, in the swing bay closest to the gate there hangs a derelict, partial toddler bucket seat which is non-compliant (ASTM F1487-17 Sec. 6.2) and a Class 1 Hazard (Photo 17)

- **Action to be taken:** Remove and/or replace the bucket swing and chain.
- **Timing:** Immediate

7. Some swing attachment and hanging hardware worn and rusty and/or have excessive surplus chain hanging at hanger attachment(ASTM F1487-17 Sec. 4.1.1 & Sec. 6.6.2.3) -*Warning:* Potential Class 1 Hazard for failure or entanglement (ASTM F1487-17 Sec. 3.1.53).

- Please see discussion and recommendation on page 6 under **Common Findings**
Discussion: swing hardware and seats.

8. No documentation of origination, purchase, maintenance or inspection history of the equipment on the site or at Maintenance Division offices (ASTM 1487-17 Sec. 13.3, Sec. 5.1 & the CPSC Handbook Sec. 4.4).

- Please see discussion and recommendation on page 7 under **Common Findings**
Discussion: CPSI/staff training & maintenance method and Lack of documentation and history

11. All play structures including the large composite play structure failed to have manufacturer's identification (ASTM 1487-17 Sec. 15).

- **Action to be taken:** Document information on large composite unit with manufacturer or manufacturer's representative and document information on other equipment as able.
- **Timing:** As time permits, to be complete within 6 months.

12. Teeter totters are not anchored (ASTM 1487-17 Sec. 5.3)-Class 2 Hazard.

- Action to be taken: anchor teeter totter unit after surfacing, use and circulation zone issues are resolved.
- Timing: Prior to 2020/2021 school year

THE BALANCE OF THIS PAGE LEFT INTENTIONALLY BLANK

Tellico Plains Intermediate School

Overview: This playground area is anchored by a large Landscape Structures composite unit. In addition there is a freestanding infinity climber, a caterpillar climber, corkscrew slide, zip line, composite climber unit (blue), 3 inverted "U" pipe climbers or upper body units(?) and two 2 bay and one 3 bay swing sets. One swing was found broken when the inspection occurred as was the bubble panel and one barrier on the composite unit and all were reported to the Maintenance Division. There is no specific access control or fence for the playground area.

Professional Judgment and Opinion: Swing sets at this location are in good condition with a couple of exceptions. There is a need for repair under one unit as a result of kick out activity. For the majority part the remedy for this activity and repeated repairs is the installation of heavy weight swing wear mats as outlined in the section titled **Fall surfacing and use zones**.

The other is that consideration should be given to the use of "C-clevis" at the hanger end of the chain as is currently being used on the seat end. The C-clevis affords better durability and wear characteristics that the current direct connect of chain.

There are several locations throughout the system where a bright chain is being used. As I have previously written:

"There is a need to verify that the bright replacement swing chain and hardware that has been used is rated for swing use. It does not have the physical attributes that are expected of swing use rated materials."

I continue to have concerns regarding this swing chain, as have others whom I've show the photos to, which is used extensively at this location. I would continue to stress the need to verify that this material is certified for use as swing chain.

Defects Noted:

1. Absence of Warning Signs and Equipment Stickers (ASTM F1487-17 Sec14)-Class 1 Hazard

- Please see discussion and recommendation on page 4 under **Common Findings**
Discussion: Warning signs and stickers.

2. Fall surfacing does not meet ASTM or CPSC criteria (ASTM F1292-17 & CPSC Handbook Sec. 2.4)-Class 1 Hazard. This appears to be due to settling and compaction. Field observations found 6" of wood chips in the use zones.

- **Action to be taken:** 1) Add 3" of the same fall attenuation material to the site overfilling by 10% in high use areas. 2) Consider the addition of wear mats per the discussion in the section titled **Fall surfacing and use zones**.
- **Timing:** Additional fill-immediately. Installation of wear mats-concurrent with actions on other sites.

3. No documentation of origination, purchase, maintenance or inspection history of the equipment on the site or at Maintenance Division offices (ASTM 1487-17 Sec. 13.3, Sec. 5.1 & the CPSC Handbook Sec. 4.4).

- Please see discussion and recommendation on page 7 under Common Findings Discussion: CPSI/staff training & maintenance method and Lack of documentation and history

4. All play structures other than the large composite play structure failed to have manufacturers identification (ASTM 1487-17 Sec. 15).

- Action to be taken: Document document information equipment other than the large composite structure as able.
- Timing: As time permits, to be complete within 6 months.

5. Swing attachment and hanging hardware worn and rusty and/or have excessive surplus chain hanging at hanger attachment (ASTM F1487-17 Sec. 4.1.1 & Sec. 6.6.2.3) -*Warning: Potential Class 1 Hazard for failure or entanglement (ASTM F1487-17 Sec. 3.1.53).*

- Please see discussion and recommendation on page 6 under Common Findings Discussion: swing hardware and seats.

THE BALANCE OF THIS PAGE LEFT INTENTIONALLY BLANK

Madisonville Primary School

Overview: The site of this playground is between wings of the school and if viewed from above would roughly form an inverted "V" with the open end being the open section at the top of the "V" and the point being where the two wings connect. The open end has a 4' tall chain link fence with a pedestrian gate nearest the parking lot. The gate is not automatically closing and latching. This site is unique in that it is divided into two separate zones by a low white fence. The largest area, which is accessed by the pedestrian gate nearest the parking lot, or directly from the school structure, is designated for the Kindergarten and above population. The smaller area, farthest into the site and behind the low white fence, is reserved for the exclusive use of the pre-kindergarten clients. The low white fence has two gates at opposite ends at the structure and neither is automatically closing and latching. One gate is missing a latch plate. The access for both sites is most commonly gained by the school building. For purposes of the evaluation I will differentiate the two areas.

The pre-kindergarten area has a double bay swing unit, two spring toys, a pipe car, small composite structure manufactured by Little Tykes Commercial, a picnic/rain shelter with two picnic tables sans roof, an all plastic composite unit by Little Tykes utilized by the smallest clients and a half a climbing wall circular section which has been laid prostrate to form a tunnel and wide arch climber structure. Only the two composite structures have manufactures identification.

In the kindergarten and above zone, as you enter from the pedestrian gate, you first encounter a balance/spring seat unit, next is a four bay, 2 swings per bay, swing set, a small composite structure manufactured by Little Tykes Commercial then two geodesic domes and a Sii composite unit. As you move across the courtyard you encounter a wheelchair platform swing and a handicapped swing in a single bay unit. As you move towards the fence there are both large and small composite structures that bear no manufactures data but based paint scheme, embossing on plastic components and unique play events I would say they are Miracle (Photo 18). Photos should be sent to the manufacture or their representative to verify my supposition and gather relevant information. The next unit encountered is a 4 bay swing set then a sun/rain shelter.

Defects Found (kindergarten and above equipment):

1. Absence of Warning Signs and Equipment Stickers (ASTM F1487-17 Sec14)-Class 1 Hazard
 - Please see discussion and recommendation on page 4 under **Common Findings**
Discussion: Warning signs and stickers.
2. Fall surfacing does not meet ASTM or CPSC criteria (ASTM F1292-17 & CPSC Handbook Sec. 2.4)-Class 1 Hazard. Field observations found 0-1" of medium gravel in the use zones of all equipment except probable Miracle equipment where 0-1" of EWF was found.
 - Please see discussion and recommendation on page 5 under **Common Findings**
Discussion: Fall surfacing and use zones.
3. Little Tykes composite structure by the entrance to parking lot has had a wooden deck bridge inserted to replace an original component that has failed. The wooden unit is split and splintering and needs to be replaced with a new deck or original component. (Photo 19)
 - **Action to be taken:** Replace the existing wooden bridge

- **Timing:** Completed prior to the 2020/2021 school year.

4. Little Tykes composite structure by the entrance to parking lot has a trapeze attached to an over head horizontal ladder. This does not meet the use zone requirements (ASTM F1292-17) is a Class 1 Hazard. (Photo 20)

- **Action to be taken:** Removal of Trapeze
- **Timing:** Immediate

5. The swing bay that holds the handicapped swings has a single platform unit to permit wheelchair use and a modified special needs swing unit (Photo 21). ASTM and CPSC criteria are designed to address more or less commonly found equipment and situations in the playground environment. When a unique item or situation is found the CPSI is taught to apply standards as best they can and use their professional judgment, as defined in ASTM F1487-17 Sec 3.1.28. The platform unit to permit wheelchair use is such a piece of equipment. The issue with the item is not an inability to check common systems such as the means and methods of attachment and hanging, crush and shear, hardware utilized and other items. The issue is it's size, weight, potential swing rate and probability of severe injury or damage another client if struck.

On January 12, 1995, in release #95-059, the CPSC banned and recalled heavy animal swings due to severe injury to over 40 children. The platform swing, especially when loaded, is far heavier than these animal swings, and would have considerably more potential for injury if another child was struck. The reality is that the activity on the wheelchair platform swing is much closer monitored and supervised than was use of the animal swings. After consulting with other CPSI's, a review of the literature and drawing upon my experience of over 30 years involvement with playgrounds it is my professional judgment that:

- The use zone to front and rear (2X the distance of the pivot point to the surfacing (ASTM F1487-17 Sec. 9.4.1.1) is currently adequate.
- The use zone from the end of the swing frame out towards the composite structure is currently designated as a minimum of 6 feet (ASTM F1487-17 Sec. 9.2.1) and is currently adequate.
- Due to the mass of the platform swing and potential injury a special use zone of 6' shall be created and extend from the inside swing hanger towards the end of the frame structure towards the white fence. This will require the relocation of the handicapped swing into one of the other swing bays, replacing one sling swing. (Photo 21)
- **Action to be taken:** Removal and relocation of the special needs swing
- **Timing:** 1) Removal-Immediate 2) Relocation/re-installation as time permits

6. Some swing units had deficit in use zones (ASTM F1487-17 Sec. 9.4.1.1)-Class 1 Hazard

- Please see discussion and recommendation on page 5 under **Common Findings Discussion: Fall surfacing and use zones.**

7. Some swing attachment and hanging hardware worn and rusty and/or have excessive surplus chain hanging at hanger attachment (ASTM F1487-17 Sec. 4.1.1 & Sec. 6.6.2.3) -*Warning*: Potential Class 1 Hazard for failure or entanglement (ASTM F1487-17 Sec. 3.1.53).

- Please see discussion and recommendation on page 6 under Common Findings
Discussion: swing hardware and seats.

8. Some swing seats worn, chipped or exposed metal straps (ASTM F1487-17 Sec. 6.2) -Class 2 Hazard

- Please see discussion and recommendation on page 6 under Common Findings
Discussion: swing hardware and seats.

9. No documentation of origination, purchase, maintenance or inspection history of the equipment on the site or at Maintenance Division offices (ASTM 1487-17 Sec. 13.3, Sec. 5.1 & the CPSC Handbook Sec. 4.4).

- Please see discussion and recommendation on page 7 under Common Findings
Discussion: CPSI/staff training & maintenance method and Lack of documentation and history

10. All play structures with the exception of three smaller composite play structures failed to have manufacturers identification (ASTM 1487-17 Sec. 15).

- Action to be taken: Three of the smaller composite structures are marked; two as Little Tykes and one as Sii. These manufactures should be contacted ASAP to secure any historical purchase, maintenance or installation information. The two remaining composite structures are believe to be Miracle. Pictures should be forwarded to the manufacturer for verification. Once verified inquire as to any information they may have regarding the equipment (operations and maintenance information, known problems and repairs, purchase history, etc.). Continue research to identify manufactures of other units
- Timing: As time permits, to be complete within 6 months.

11. Picnic table is in the wheel chair platform to-fro swing use area (ASTM F1487-17 Sec. 9.4.1.1)-Class 1 Hazard (Photo 21)

- Action to be taken: Move table out of use zone.
- Timing: Immediate

12. The slide entries of all slides on the two Miracle composite structures had entanglements (ASTM F1487-17 Sec. 6.4 & 6.4.1)-Class 1 Hazard (Photos 22 & 23)

- Action to be taken: Contact manufacturer immediately to resolve hazard.
- Timing: Immediate

Defects Found (pre-kindergarten equipment):

1. Absence of Warning Signs and Equipment Stickers (ASTM F1487-17 Sec14)-Class 1 Hazard

- Please see discussion and recommendation on page 4 under Common Findings

Monroe County (TN) Board of Education-Assessment of Playground Facilities
Park Services, LLC, Chattanooga, Tennessee February 7, 2020

Discussion: Warning signs and stickers.

2. No documentation of origination, purchase, maintenance or inspection history of the equipment on the site or at Maintenance Division offices (ASTM 1487-17 Sec. 13.3, Sec. 5.1 & the CPSC Handbook Sec. 4.4).

- Please see discussion and recommendation on page 7 under **Common Findings Discussion: CPSI/staff training & maintenance method and Lack of documentation and history**

3. Fall surfacing under the two bay swing does not meet ASTM or CPSC criteria (ASTM F1292-17 & CPSC Handbook Sec. 2.4)-Class 1 Hazard. Field observations found 2-4" of medium gravel in the use zones. Recommend conversion to EWF or virgin wood chips tested and certified for use as playground surfacing.

- Please see discussion and recommendation on page 5 under **Common Findings Discussion: Fall surfacing and use zones.**

4. Swing attachment and hanging hardware worn and rusty and/or have excessive surplus chain hanging at hanger attachment (ASTM F1487-17 Sec. 4.1.1 & Sec. 6.6.2.3) -*Warning*: Potential Class 1 Hazard for failure or entanglement (ASTM F1487-17 Sec. 3.1.53).

- Please see discussion and recommendation on page 6 under **Common Findings Discussion: swing hardware and seats.**

5. Only the composite structure has a manufactures identification. The balance of the equipment failed to have manufacturers identification (ASTM 1487-17 Sec. 15).

- **Action to be taken:** The manufacturer of the composite structure, Little Tykes, should be contacted ASAP to secure any historical purchase, maintenance or installation information. Continue research to identify manufactures of other units
- **Timing:** As time permits, to be complete within 6 months.

Professional Judgment and Opinion: The surfacing under the composite structure in the pre-kindergarten area is shredded tire surfacing and while the installation meets fall attenuation criteria, it can be problematic. It can be easily moved by water and can be exceptionally dirty and mark skin and stain clothing while being difficult and costly to secure additional identical material for maintenance replacement. In this particular setting it can, however, be an acceptable surfacing material and meets fall attenuation criteria base on fall heights for the existing equipment. The difficulty is that there is also a growing body of anecdotal and scientific evidence that would appear to categorize potential health considerations when recycled tire products are utilized in a sports or recreational environment. It is for these reasons I would strongly recommend consideration for conversion of the shredded rubber fall attenuation surfacing at MPS to either a EWF or virgin wood chip material compliant with ASTM guidelines for use as surfacing in playgrounds.

THE BALANCE OF THIS PAGE LEFT INTENTIONALLY BLANK

Vonore Elementary School

Overview: This playground is expansive in its footprint and lies between school structures on two sides with a primary arterial road on one side and a secondary road on the other. The site has a chain link fence which ties into the structures. There is one pedestrian access from the parking lot which does not automatically close or latch. There is a keypad lock on the gate which is compromised. A double service gate was noted and was chained and locked. Primary access to the playground is from the structures. The equipment is effectively in three groupings. The first is a pre-kindergarten equipment area isolated from the balance of the site by a 4' chain link fence with a combination service/pedestrian gate. Equipment in the pre-kindergarten includes a small composite structure which looks to be Playworld Systems but no manufactures identification was noted; a small 4 way teeter-totter which was attached; Two low balance beams; a wooden Playworld composite structure; a single two bay swing and; a half section of a climbing wall that has been set on its side to create a tunnel and low climbing structure. The second area is on the same grade as the primary arterial road and runs parallel to the roadway. Equipment in this area included a double 2 bay swing; merry-go-round; 4-way arch climber; a "volcano" climber with hand and foot holds; a large 4-way teeter-totter unit; a freestanding triple slide and; a larger Playworld composite structure. The third area also runs parallel to the roadway but is considerably close to the school classrooms. This area is considerably above the second area and on the same elevation as the pre-kindergarten equipment. Equipment in this area includes two double 3 bay swing units; two double 2 bay swing units; and three "old school" freestanding pieces, a slide, a horizontal ladder and a climber.

Defects Found (kindergarten and above areas):

1. Absence of Warning Signs and Equipment Stickers (ASTM F1487-17 Sec14)-Class 1 Hazard
 - Please see discussion and recommendation on page 4 under **Common Findings**
Discussion: Warning signs and stickers.

2. Fall surfacing does not meet ASTM or CPSC criteria (ASTM F1292-17 & CPSC Handbook Sec. 2.4)-Class 1 Hazard. Field observations found 0-3" of EWF or wood chips in the use zones.
 - Please see discussion and recommendation on page 5 under **Common Findings**
Discussion: Fall surfacing and use zones.

3. No documentation of origination, purchase, maintenance or inspection history of the equipment on the site or at Maintenance Division offices (ASTM 1487-17 Sec. 13.3, Sec. 5.1 & the CPSC Handbook Sec. 4.4).
 - Please see discussion and recommendation on page 7 under **Common Findings**
Discussion: CPSI/staff training & maintenance method and Lack of documentation and history

4. All play structures with the exception of the larger Playworld composite play structures failed to have manufacturers identification (ASTM 1487-17 Sec. 15).
 - **Action to be taken:** The unit that is marked should have manufactures contacted ASAP to secure any historical purchase, maintenance or installation information. Continue research to identify manufactures of other units.

- **Timing:** As time permits, to be complete within 6 months.

5. In the equipment closest to the building there are two double bay swing units with three swings in each bay (4 bays total). ASTM F1487-17 Sec. 8.6.4.4 limits swing bays to two units. This is a Class 1 Hazard. (Photo 24)

- **Action to be taken:** Remove the third swing and all associated hardware, including the hanger on the cross member.
- **Timing:** Immediate

6. In the first swing unit encountered from the pedestrian access there is a power pole in the use zone for the support structure for the unit (ASTM F1487-17 Sec. 9.4.1.5)-Class 2 Hazard. (Photo 25)

- **Action to be taken:** There are two basic options; 1) It is highly unlikely that the power company would relocate the pole to be outside the use zone without considerable expense to the Board of Education, however, they need to be asked as it would appear the pole was installed after the swing unit was in place creating the non-compliance issue and the distance to be moved is not considerable. 2) Relocate the swing unit to eliminate the non-compliance issue.
- **Timing:** 1) Contact the power company immediately and make the request for pole relocation. 2) If the power company declines to move the pole evaluate and develop an alternative option and execute before the beginning of the 2020/2021 school year.

7. All swing units "S" hooks failed the 0.04" gap test for entanglement and/or other "S" hook specific requirements (ASTM F1487-17 Sec. 6.4.5 & Sec 6.4.5.1) . Class 1 & 2 hazards. (Photo 26)

- Please see discussion and recommendation on page 6 under **Common Findings**
Discussion: swing hardware and seats.

8. Some swing attachment and hanging hardware worn and rusty and/or have excessive surplus chain hanging at hanger attachment(ASTM F1487-17 Sec. 4.1.1 & Sec. 6.6.2.3) -Warning: Potential Class 1 Hazard for failure or entanglement (ASTM F1487-17 Sec. 3.1.53). (Photo 27)

- Please see discussion and recommendation on page 6 under **Common Findings**
Discussion: swing hardware and seats.

9. The merry-go-round, based on observation and field evaluation, does not appear to have a speed limiting device. Base on this lack of a speed limiting device and a diameter greater than 20" it is found to be governed by ASTM F1487-17 Sec. 9.3.3 which references Sec. 8.8.3.4 and requires a total 108" use zone with the first 72" from the equipment being non-overlapping as measured from the outside perimeter of the equipment. A total 72" use zone was assumed when field work was conducted.

- **Action to be taken:** Re-evaluate the unit with a 108" use zone and take necessary actions, such as the removal of existing trees, as necessary.
- **Timing:** Immediate

10. The slide run out use zones on the large Playworld composite structure do not meet ASTM F1487-17 Sec. 9.6.2.1.

- Please see discussion and recommendation on page 5 under Common Findings Discussion: Fall surfacing and use zones.

Defects Found (pre-kindergarten area):

1. Absence of Warning Signs and Equipment Stickers (ASTM F1487-17 Sec14)-Class 1 Hazard

- Please see discussion and recommendation on page 4 under Common Findings Discussion: Warning signs and stickers.

2. Fall surfacing does not meet ASTM or CPSC criteria (ASTM F1292-17 & CPSC Handbook Sec. 2.4)-Class 1 Hazard. Field observations found 0-2" of medium gravel in the use zones.

- Please see discussion and recommendation on page 5 under Common Findings Discussion: Fall surfacing and use zones.

3. No documentation of origination, purchase, maintenance or inspection history of the equipment on the site or at Maintenance Division offices (ASTM 1487-17 Sec. 13.3, Sec. 5.1 & the CPSC Handbook Sec. 4.4).

- Please see discussion and recommendation on page 7 under Common Findings Discussion: CPSI/staff training & maintenance method and Lack of documentation and history

4. All play structures with the exception of the wood composite play structure failed to have manufacturers identification (ASTM 1487-17 Sec. 15).

- Action to be taken: The unit that is marked should have manufactures contacted ASAP to secure any historical purchase, maintenance or installation information. Pictures of the remaining composite structure in the pre-kindergarten area should be forwarded to Playworld for verification of manufacturer. Once verified inquire as to any information they may have regarding the equipment (operations and maintenance information, known problems and repairs, purchase history, etc.). Continue research to identify manufactures of other units.
- Timing: As time permits, to be complete within 6 month

5. Swing attachment and hanging hardware worn and rusty and/or have excessive surplus chain hanging at hanger attachment(ASTM F1487-17 Sec. 4.1.1 & Sec. 6.6.2.3) -*Warning:* Potential Class 1 Hazard for failure or entanglement (ASTM F1487-17 Sec. 3.1.53).

- Please see discussion and recommendation on page 6 under Common Findings Discussion: swing hardware and seats.

6. Wood composite structure is in marginal condition with prior repairs. Wood is rotted in spots, exhibits insect damage, is checked and split and, generally, at or very near the end of its service life. (Photo 28) The unit has two slides with steel slide boards which will get exceptionally hot in warmer weather and has the potential for second and third degree burns on tender skin. Steel slide beds are no longer utilized except as an accommodation for users with cochlear ear

implants and then extraordinary measures are normally taken to reduce surface temperatures. Some steel components heavily rusted at welds and material intersections. (Photo 29)

- Action to be taken: Remove and replacement with comparable unit if funding is available.

- Timing: Removal-Next 60 days. Replacement: As funding is available

7. Fall surfacing does not meet ASTM or CPSC criteria (ASTM F1292-17 & CPSC Handbook Sec. 2.4)-Class 1 Hazard

- Please see discussion and recommendation on page 5 under Common Findings
Discussion: Fall surfacing and use zones.

THE BALANCE OF THIS PAGE LEFT INTENTIONALLY BLANK

Madisonville Intermediate School

Overview: This playground is located behind the gym on the far side of a parking lot. A picnic shelter sits in between the parking lot and playground. There is no perimeter fencing. As you stand with your back to the parking lot an additional playground, owned by the Boys & Girls Club, is to the left of the BOE equipment. The Boys & Girls Club equipment was not evaluated as a portion of this contract. BOE equipment on site includes two 3 bay swing units, a single 2 bay swing unit; a wood Playworld composite structure; a freestanding slide; a large Miracle 2-12 composite structure; an exceedingly tall freestanding slide and a large spinner/merry-go-round type unit.

Defects Found:

1. Absence of Warning Signs and Equipment Stickers (ASTM F1487-17 Sec14)-Class 1 Hazard
 - Please see discussion and recommendation on page 4 under **Common Findings**
Discussion: Warning signs and stickers. There are some stickers on the Miracle 2-12 composite structure but they are marginally legible and require replacement

2. Fall surfacing does not meet ASTM or CPSC criteria (ASTM F1292-17 & CPSC Handbook Sec. 2.4)-Class 1 Hazard. Field observations found 0-2" of medium gravel in the use zones of the wood composite structure and the two 3 bay swing units and 0-2" of shredded tires under the other equipment.
 - Please see discussion and recommendation on page 5 under **Common Findings**
Discussion: Fall surfacing and use zones.

3. No documentation of origination, purchase, maintenance or inspection history of the equipment on the site or at Maintenance Division offices (ASTM 1487-17 Sec. 13.3, Sec. 5.1 & the CPSC Handbook Sec. 4.4).
 - Please see discussion and recommendation on page 7 under **Common Findings**
Discussion: CPSI/staff training & maintenance method and Lack of documentation and history

4. All play structures with the exception of the wood composite play structure and the Miracle 2-12 composite structure failed to have manufacturers identification (ASTM 1487-17 Sec. 15).
 - **Action to be taken:** The unit that is marked should have manufactures contacted ASAP to secure any historical purchase, maintenance or installation information. Both of the freestanding slides and the spinner may be Miracle and pictures should be forwarded to manufacturer for verification. Once verified inquire as to any information they may have regarding the equipment (operations and maintenance information, known problems and repairs, purchase history, etc.). Continue research to identify manufactures of other units.
 - **Timing:** As time permits, to be complete within 6 month

5. Swing attachment and hanging hardware worn and rusty and/or have excessive surplus chain hanging at hanger attachment(ASTM F1487-17 Sec. 4.1.1 & Sec. 6.6.2.3) -*Warning:* Potential Class 1 Hazard for failure or entanglement (ASTM F1487-17 Sec. 3.1.53). (Photo 30)
 - Please see discussion and recommendation on page 6 under **Common Findings**

Discussion: swing hardware and seats.

6. Wood composite structure is in marginal condition with many prior repairs. Wood is rotted in spots, especially in vertical supports which have been extensively repaired. Wood also exhibits some insect damage, is checked and split and, generally, at the end of its service life. (Photos 31 & 32)

- **Action to be taken:** Remove and replacement with comparable unit if funding is available.
- **Timing:** Removal-Next 60 days. Replacement: As funding is available

7. The spinner/merry-go-round, based on observation and field evaluation, does not appear to have a speed limiting device. Base on this lack of a speed limiting device and a diameter greater than 20" it is found to be governed by ASTM F1487-17 Sec. 9.3.3 which references Sec. 8.8.3.4 and requires a total 108" use zone with the first 72" from the equipment being non-overlapping as measured from the outside perimeter of the equipment. A total 72" use zone was assumed when field work was conducted.

- **Action to be taken:** Re-evaluate the unit with a 108" use zone and take any necessary actions if required.
- **Timing:** Immediate

THE BALANCE OF THIS PAGE LEFT INTENTIONALLY BLANK

Basic Playground Inspection & Maintenance Program **Schools and High Use Parks-Inspections**

High Frequency ("Daily") Inspections (Trained Staff):

- Minimum twice a week, Monday and Thursday or Friday.
- Ideal is at least three weekdays and one weekend day or daily.
- During lower use periods the minimum can be observed (colder winter periods, summer at school sites if no summer school)

Low Frequency ("Monthly") Inspections (Ideally by CPSI):

- Monthly

Low Use Parks-Inspections

High Frequency ("Daily") Inspections (Trained Staff):

- Twice a week, Monday and Thursday or Friday.

Low Frequency ("Monthly") Inspections (Ideally by CPSI):

- Bi-monthly or Quarterly

Notes:

- Monday inspections are critical to the safety of patrons. A lot can happen on sites on the weekend and it's incumbent that venues be checked as soon as possible on Mondays.
- The term "trained staff" could be anyone; site staff, roving staff that have need to be onsite periodically or someone that casually stops by. They just need to be trained and take the initiative to perform the inspection and document. There are cases where teachers or school admin staff have performed the function of "trained staff" with great success. The function is not restricted to maintenance personnel.

Annual Maintenance Cycle All Schools and Parks

January-March: Determination of summer work to include surfacing material replenishment, component or equipment replacement.

March: Determine quantities for surfacing material replenishment, get PO's by location in place by mid-April and get on vendor schedule.

April: PO's in place for equipment and component replacement

April/May: Update CIP needs and schedule for next 5 years, or as required (assumes October Fiscal Year start)

June-July: Installation of surfacing material replenishment (school sites), replacement of components and equipment (school sites).

August-September: Installation of surfacing material replenishment (park sites), replacement of components and equipment (park sites).

List of Attachments

1. Doug Ehman Certification as Playground Inspector
2. Low Frequency Audit Utilized
3. Audit of Surface From Utilized
4. To-Fro Swing Use Zone Graphic
5. High Frequency/Daily Audit Form
6. Copy of Field Notes: Coker Creek Elementary School
7. Copy of Field Notes: Rural Vale Elementary School
8. Copy of Field Notes: Tellico Plains Elementary School
9. Copy of Field Notes: Tellico Plains Intermediate School
10. Copy of Field Notes: Madisonville Primary School
11. Copy of Field Notes: Vonore Elementary School
12. Copy of Field Notes: Madisonville Intermediate School

National Recreation and Park Association

Let it be known that

DOUG EHMAN

has met the requirements of the standards set forth by the
National Certification Board
and is hereby granted certification as a



Certified Playground Safety Inspector

CHAIRPERSON

NRPA PRESIDENT AND CEO

September 14, 2018

DATE CERTIFIED

43089-1021

CERTIFICATION NUMBER

October 01, 2021

EXPIRATION DATE

1. Doug Ehman Certification as
Playground Inspector

2. Low Frequency Audit Form
Utilized

Low Frequency Playground Inspection (Quarterly/Semiannually)

Playground	Inspector	Date				
Page _____ of _____ (Hands On- Physical Check - Inspector)	Equipment List					
GENERAL SAFETY						
1. Warning labels and age signage present and legible						
2. Equipment free of crush and shear hazards						
3. Equipment free of entanglement hazards, protrusions						
4. Equipment free of sharp points, edges						
5. Bolts ends less than two threads, rounded, smooth						
6. No change in openings causing head entrapment						
7. No insect, bird or animal infestation						
FINISHES & MATERIAL CONDITIONS						
1. Metal surfaces are free of rust and loose paint chips						
2. Surfaces are clean, free of graffiti and vandalism						
3. Wood is free of rot, splinters, warping, checking						
4. Free of bent, broken, missing parts, excessive wear						
5. Plastics components are free of cracks						
6. Welds are intact and crack free						
7. PVC coatings are not peeling and in good condition						
FASTENERS						
1. Hardware is present, tight and fully engaged						
2. Pipe caps are present on ends of tubing						
3. Fittings/bearings are functional, greased, squeak free						
4. Turnbuckles are engaged and properly adjusted						
5. Cables/ropes are anchored and not unraveled						
STRUCTURAL MEMBERS						
1. Footings/anchoring devices are secure and stable						
2. Structural members are sound and securely fastened						
3. Springs/rocking components in good repair						
GRIPPING & STEPPING COMPONENTS						
1. Hand gripping components secure and do not rotate						
2. Stepping surfaces are level, stable and clean						
3. Foot holds/rungs are tight and free of excessive wear						
SLIDES						
1. Slide bedway and rails are smooth and clear of debris						
2. Bedway at platform is free of entanglement hazard						
SWINGS & MOVING COMPONENTS						
1. Chains are not twisted and are free of excessive wear						
2. S-hooks are not worn and closed to within 0.04 inch						
3. Swing hangers & bushings are free of excessive wear						
4. Swing seats are smooth & in good condition						
5. Tire seats are lightweight, smooth & in good condition						
6. Tire swing assemblies greased and in good condition						
7. All moving components are in good condition, secure, & lubricated						
OTHER						
PROTECTIVE SURFACING		Comments use reverse as needed				
1. Loose-fill surfacing is level and at proper depth						
2. Use zones are clear of obstacles and debris						
3. Surface drainage is functional with no standing water						
4. Wear mats are properly secured in place, level						
5. Unitary surfaces are intact, free of depressions & ruts						
Codes	V = Okay	M = Maintenance	R = Repair Required	O = Outstanding Issue	P = Parts Needed	X = Corrected

Reviewed By: _____

Date: _____

Note: This is a quarterly/semi-annual report and designed as a sample inspection report. Manufacturer's maintenance instructions for inspection schedules and replacement parts are to be referred to prior to any repairs. Maintenance schedules should be developed based upon actual or anticipated playground use (CPSC). Retain all inspection reports to assist in developing comprehensive maintenance programs, inspection schedules, and for future budgeting and planning.

3. Audit of Surface Form Utilized

SURFACING

Playground: _____ Materials: _____

Location: _____ Surface: _____

Inspected by: _____ Ages of intended Users: _____

Location: _____ Weather: _____

Height: _____ Date of Audit: _____

PRIORITY

- ❶ Life threatening, permanent disability
- ❷ Serious or non-disabling injury
- ❸ Slight injury or may not have caused injury but does not meet ASTM F1487 or CPSC Handbook for Public Playground Safety

	CONDITION	PRIORITY	RECOMMENDATIONS
<p>Shock Absorbency of Surfacing Material</p> <ul style="list-style-type: none"> Surfacing material must yield both a peak deceleration of no more than 200 G's and a HIC (Head Injury Criteria) of no more than 1,000 when tested in accordance with procedures described in ASTM F1292 "A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment." 			
<p>Critical Height</p> <ul style="list-style-type: none"> The surfacing material used under and around a particular piece of playground equipment is to have a Critical Height value as identified for each type of equipment. 			
<p>Fall Height for Equipment</p> <ul style="list-style-type: none"> Swings: The highest accessible part of a swing is the height of the pivot point where the swing's suspending elements connect to the supporting structure. Elevated Platforms: The highest accessible part is the height of the platform surface above the playing surface. Horizontal Ladders: The highest accessible part is the maximum height of the structure. Merry-Go-Rounds: The highest accessible part is the height above the ground of any part at the perimeter on which a child may sit or stand. Seesaws: The highest accessible part is the maximum height attainable by any part of the seesaw. Spring Rockers: The highest accessible part is the maximum height above the playing surface of the seat or designated play surface. Climbers: Free-standing – highest part of the climbing equipment Access / Egress -- highest part of the climber intended for foot support. 			

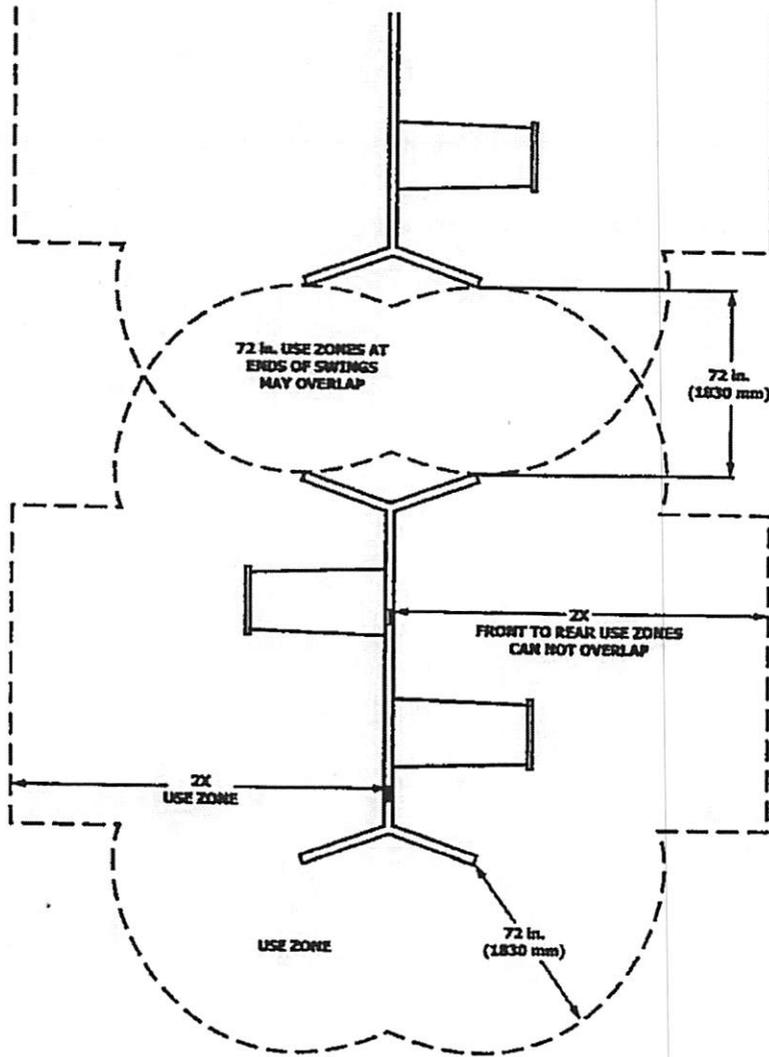
SURFACING *continued*

	CONDITION	PRIORITY	RECOMMENDATIONS
<p>Acceptability of Various Surfacing Materials</p> <ul style="list-style-type: none"> • Hard surfacing materials, such as asphalt or concrete, are unsuitable for use under and around playground equipment. • Earth surfaces such as soils and hard packed dirt are unsuitable for use under and around playground equipment. • Grass and turf are unsuitable for use under and around playground equipment. <p>Unitary Materials: (rubber mats or rubberlike materials):</p> <ul style="list-style-type: none"> • To have Identification of Critical Height rating. This information is to be attained from the manufacturer of this material. <p>Loose-Fill Material:</p> <ul style="list-style-type: none"> • Not to be installed over hard surfaces such as asphalt or concrete. • Requires a method of containment. • Requires good drainage under material. • Requires periodic renewal or replacement and continuous maintenance to maintain proper depth and remove foreign matter. • Refer to table listing the critical height (expressed in feet) for seven loose fill materials when tested in an uncompressed state at depths of 6, 9 and 12 inches. This test was conducted by CPSC staff in accordance with the voluntary ASTM F1292 standard. • Surface materials for accessibility must pass ASTM Test F1951. 			
<p>Use Zones for Equipment</p> <ul style="list-style-type: none"> • The area beneath and immediately adjacent to equipment that is designated for unrestricted circulation and on whose surface it is predicted that a user would land when falling from or exiting the equipment. Surface shall meet requirements of ASTM F1292 from the maximum fall height. 			
<p>Recommendations for Use Zone</p> <ul style="list-style-type: none"> • Stationary Equipment: The use zone is to extend a minimum of 6 feet in all directions from the perimeter of the equipment. • Slides: The use zone in front of the exit of the slide is to extend a minimum distance of 6 feet from the end of the slide chute or a maximum of 8 feet whichever is the greater. • Single-Axis Swings: The use zone is to extend to the front and rear of a single axis swing a minimum distance of 2 times the height of the pivot point above the surfacing material. • Multi-Axis Swings: The use zone is to extend in any direction from a minimum distance of 6 feet + the length of the suspending members. • Merry-Go-Rounds: The use zone is to extend a minimum of 6 feet beyond the perimeter of the platform. • Spring Rocking Equipment: The use zone is to extend a minimum of 6 feet from the perimeter of the equipment but adjacent spring rockers with a maximum seat height of 30 inches may share the same use zone. Rocking equipment meant for standing requires a use zone of 7 feet; use zones may not be shared. 			

<p>COMMENTS:</p> 	<p>ACTION TAKEN:</p> <p>DATE: _____</p> <p>BY: _____</p> <p>SUPERVISOR: _____</p>
---	---

4. To-Fro Swing Use Zone Graphic

F1487 - 17



NOTE: X = THE VERTICAL DISTANCE FROM THE PROTECTIVE SURFACE TO THE PIVOT POINT OF THE SWING

FIG. A1.34 Use Zones for To-Fro Swings
Reference Paragraphs 9.4.1.1, 9.4.1.3, 9.4.1.4, 9.4.1.5, and 9.4.1.5(1)

**5. High Frequency/Daily Audit
Form**

High Frequency Playground Inspection (Daily/Weekly)

Playground	Inspector	Week of						
Walk-through Visual Check & Routine and Cleaning Tasks		Mon	Tue	Wed	Thur	Fri	Sat	Su
GENERAL AREA								
Area is free from all trash, broken glass, weeds, and storm remnants								
All walkways are free from ice and trip hazards								
No hazards have been created by vandalism or user modification								
Drains are working properly								
There are no overhead hazards that could fall on users								
PROTECTIVE SURFACES								
Surfaces are free from all debris and foreign material								
Loose-fill surfaces are level, particularly under swings & slide exits								
Loose-fill surfaces are raked to proper depths and not compacted								
All unitary surfaces are intact and free from trip hazards								
There are no exposed footings or loose borders/curbs								
Surface drainage is functional with no standing water								
Protective surfaces are not frozen								
PLAYGROUND EQUIPMENT								
There are no damaged, loose, vandalized, or missing parts								
Equipment is not bent and is stable								
There are no user modifications, like ropes tied to parts								
All moving parts, like swing seats and chains, are in good repair								
There are no hazards from glass or other litter on the equipment								
OTHER								

Codes V = Okay M = Maintenance R = Repair Required O = Outstanding P = Parts Needed X = Corrected

Inspection Comments	Details (use back of form for additional comments) <input type="checkbox"/> See Attached	Repair Date
Mon		
Tues		
Wed		
Thurs		
Fri		
Sat		
Sun		

Reviewed By: _____ Date: _____

Note: This is a high frequency report and designed as a visual assessment of the play area, play equipment, and play surfacing. Frequently used playgrounds may require a more detailed report by a staff member experienced in repair and playground inspection. Always consult manufacturer's maintenance instructions for inspection schedules and replacement parts. "Maintenance schedules should be developed based upon actual or anticipated playground use" (CPSC). Retain all inspection reports to assist in developing comprehensive maintenance programs, inspection schedules, and for future budgeting and planning.

Codes

The following codes are used to indicate the present condition of the equipment.

Code	Explanation
✓ (Okay)	A check mark indicates that the component has been checked and that the conditions are satisfactory.
M (Maintenance)	An "M" indicates that the condition was corrected during the inspection. Examples would be tightening hardware or removing debris.
R (Repair)	An "R" indicates that repairs cannot be readily completed while the inspector is on site and follow up repairs will be necessary by a skilled staff member or outside vendor. If the condition could present a hazard to users, the equipment should be taken out of service until the situation can be corrected. When the repairs have been made, indicate so by marking an "X" for completed maintenance.
O (Outstanding)	An "O" indicates that a serious hazard may be present requiring additional action or that the inspector wants or needs a second opinion. If the condition could present a hazard to users, the equipment should be taken out of service until the situation can be corrected. When the repairs have been made, indicate so by marking an "X" for completed maintenance. Examples: <ul style="list-style-type: none">o The inspector may not have the authority to order the removal of a piece of equipment.o The inspector may be unsure of the existence of a protrusion or entanglement hazard and needs to consult with a CPSI.o The structural integrity of a piece of playground equipment is in question and a structural engineer must be consulted.
P (Parts)	A "P" indicates that replacement parts are required and need to be ordered and installed. If the condition could present a hazard to users, the equipment should be taken out of service until the situation can be corrected. When the repairs have been made, indicate so by marking an "X" for completed maintenance.
X (Completed)	An "X" indicates that all necessary work and actions have been taken to repair, replace, or remove an unacceptable condition. Make certain that the date of correction is written beside the "X."

Comments:

CROKER CREEK ES

6. Copy of Field Notes: Coker
Creek Elementary School

1/14/20 Tue 9:30 Hard Pan / Very wet / drizzle
no stickers - no signs

Not to scale

Large trees
Perimeter fence good
No self closing gate

Camp

Surface RUST on Steel
Die pressure washing
Mulch in high traffic areas
Tub slide exit
Surface

Slides

"S" hooks

- wear

- opening

Seats?

- height

- Condition

Climb wall

Surface -

Genie Wheel Clips

Tube slide - 238" high ✓

Use zones → Slide Exit 72"-96" 6-8"

→ Swings approx Pivot

→ General 72"

→ Overhead 84" above highest play surface

** House keeper - Swings - Exits

* Barnes Inc.
Landscape Structures

Playzone

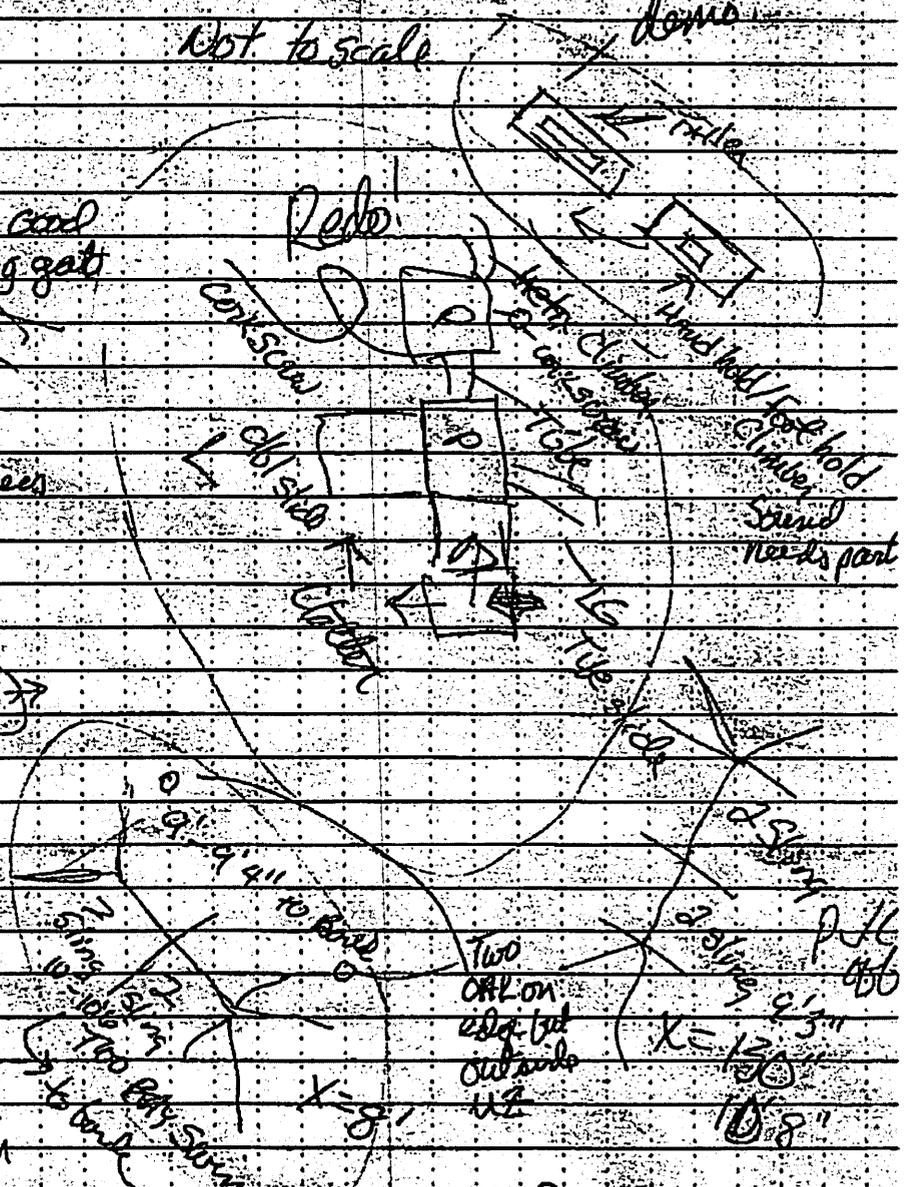
Murphy Rec. Inc.

800-373-5453

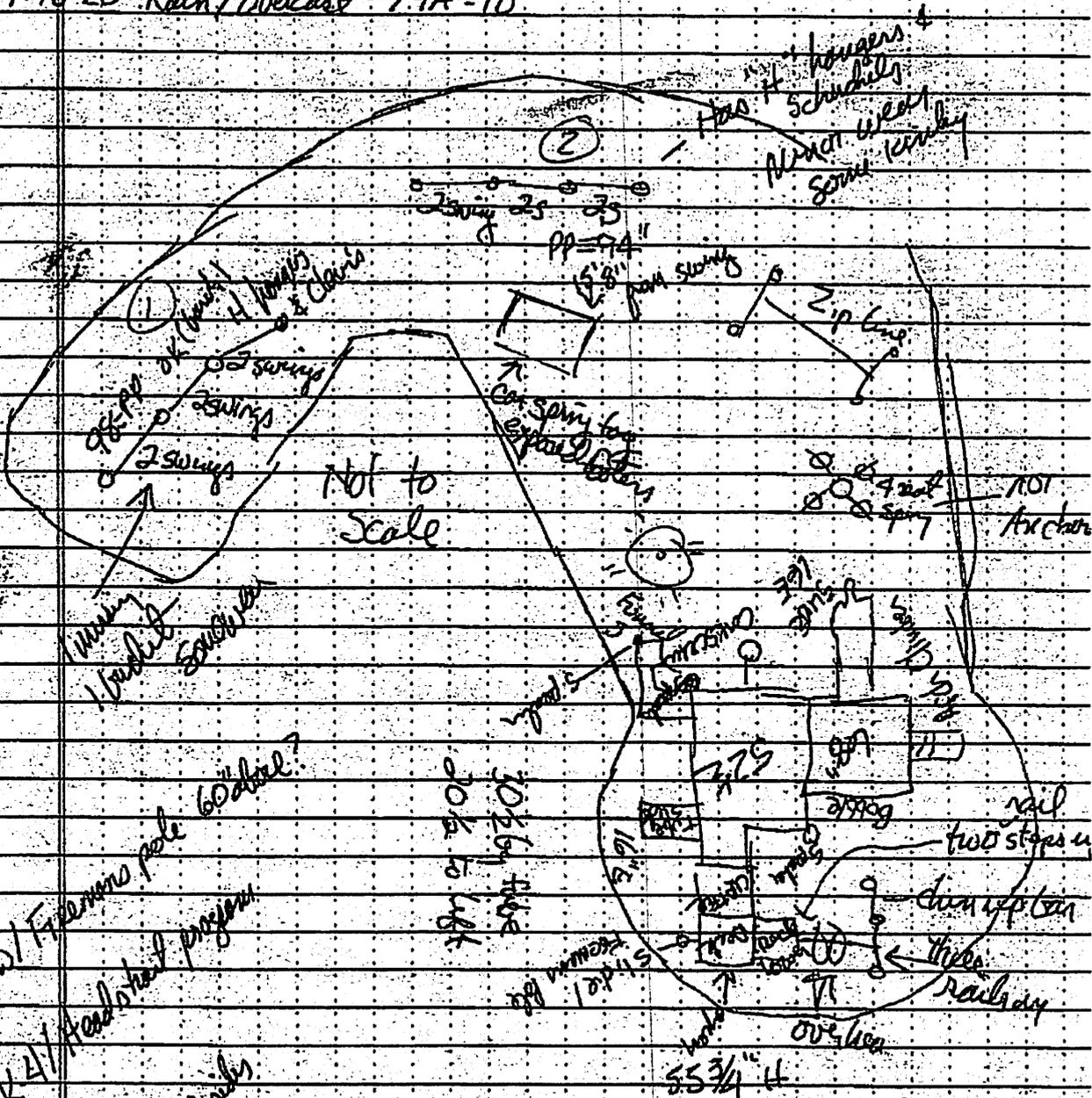
Height dbl 15, Time 200"

Tube 25"

Phillip - has P.I.



TPES 1.17.20 Overcast Ending 3:30p - 4
 1.15.20 Rain/Overcast → 9A - 10



Not to Scale

Conks around Fireman's pole 60' dia?
 Do have KAI Headstart program

over head 98" duct to bin
 5 1/2" to bin top
 3 to bin
 1 embayment deck on top
 head
 bin up 75"

Zip 63' bottom of beam
 3/2 parallel
 Min. height 5' 6"

Crawl and Stair c. latter
 bridge on outer side

* * * Landscape
 Structures

List of Photos

1. Coker Creek Elementary School (CCES)- "S" Hook excessive gap (typical of other locations and sites)
2. CCES- Clatter bridge crush and shear
3. CCES- Bolt protrusion on viewing bubble (typical of other locations and sites)

4. Rural Vale Elementary School (RVES)- Damage/condition to/of pipe frame assembly on swings
5. RVES- Swing hanger wear (typical of other locations and sites)
6. RVES- Worn swing attachment hardware (typical of other locations and sites)
7. RVES- Worn and damaged swing seat (typical of other locations and sites)
8. RVES- Small wooden play structure
9. RVES- Spring toys, insufficient use zone
10. RVES- Teeter-totters, absence of shock absorbing material
11. RVES- Picnic tables sitting in swing use zone
12. RVES- Mold on/in transfer tube (typical of other locations and sites)

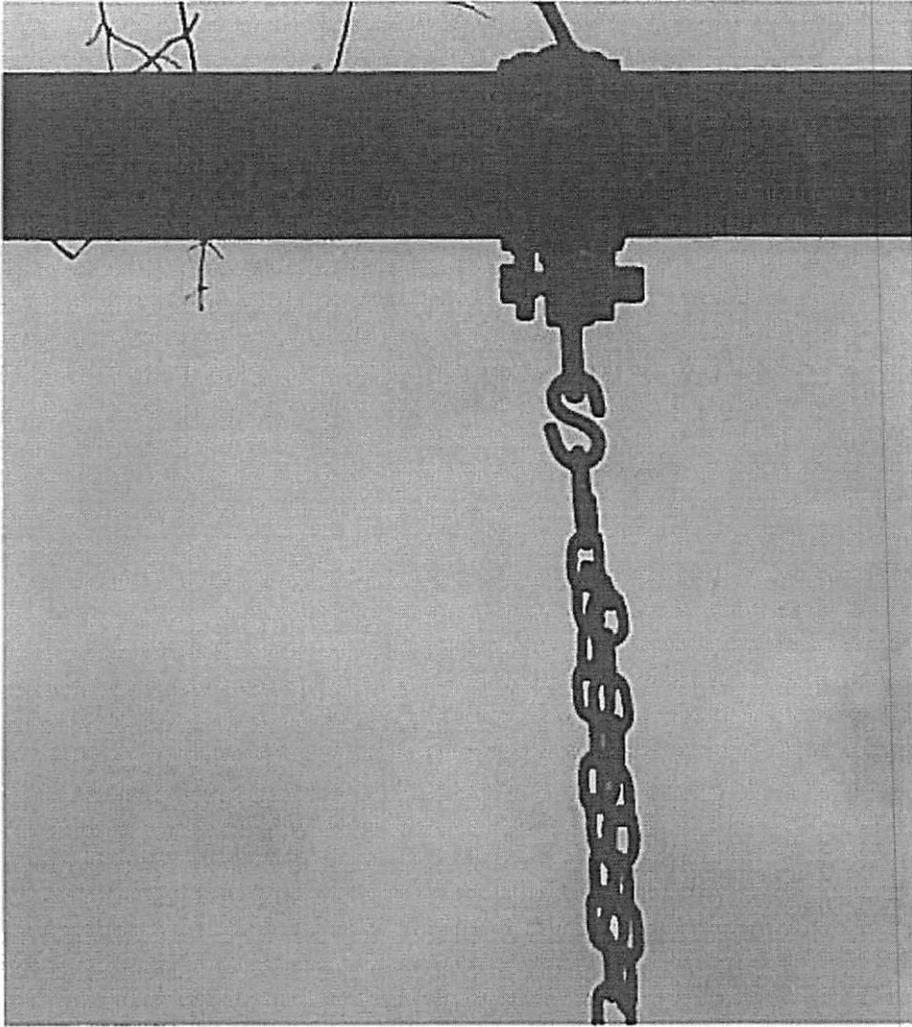
13. Tellico Plains Elementary School (TPES)- Pipe style car with no surfacing and exposed footers
14. TPES- Clatter bridge crush and shear
15. TPES- Missing barrier on 54.5" tall open platform
16. TPES- Upper body horizontal ladder entanglement on deck end attachment
17. TPES- Derelict half-bucket swing

18. Madisonville Primary School (MPS)- Two probable Miracle Equipment units
19. MPS- Little Tykes Commercial unit by parking lot entrance with home made wooden bridge substituted for OEM clatter bridge
20. MPS- Little Tykes Commercial unit by parking lot entrance with trapeze attached to upper body unit/overhead ladder
21. MPS- Platform wheelchair swing
22. MPS- Probable Miracle Equipment slide entry entanglements photo 1 (typical for both units and all slides)
23. MPS- Probable Miracle Equipment slide entry entanglements photo 2 (typical for both units and all slides)

24. Vonroe Elementary School (VES)- 3 swings in one bay
25. VES- Power pole in swing use zone
26. VES- Worn swing attachment hardware & violation of 0.04" "S" hook gap criteria (typical of other locations and sites)
27. VES- Swing hanger & "S" hook wear and condition (typical of other locations and sites)
28. VES- Insect damage of wooden structure in pre-kindergarten area
29. VES- Rust on steel portion of wooden structure in pre-kindergarten area
30. Madisonville Intermediate School (MIS)- Swing hanger wear and condition

- (typical of other locations and sites)
- 31. MIS- Condition of wood structure photo 1
 - 32. MIS- Condition of wood structure photo 2

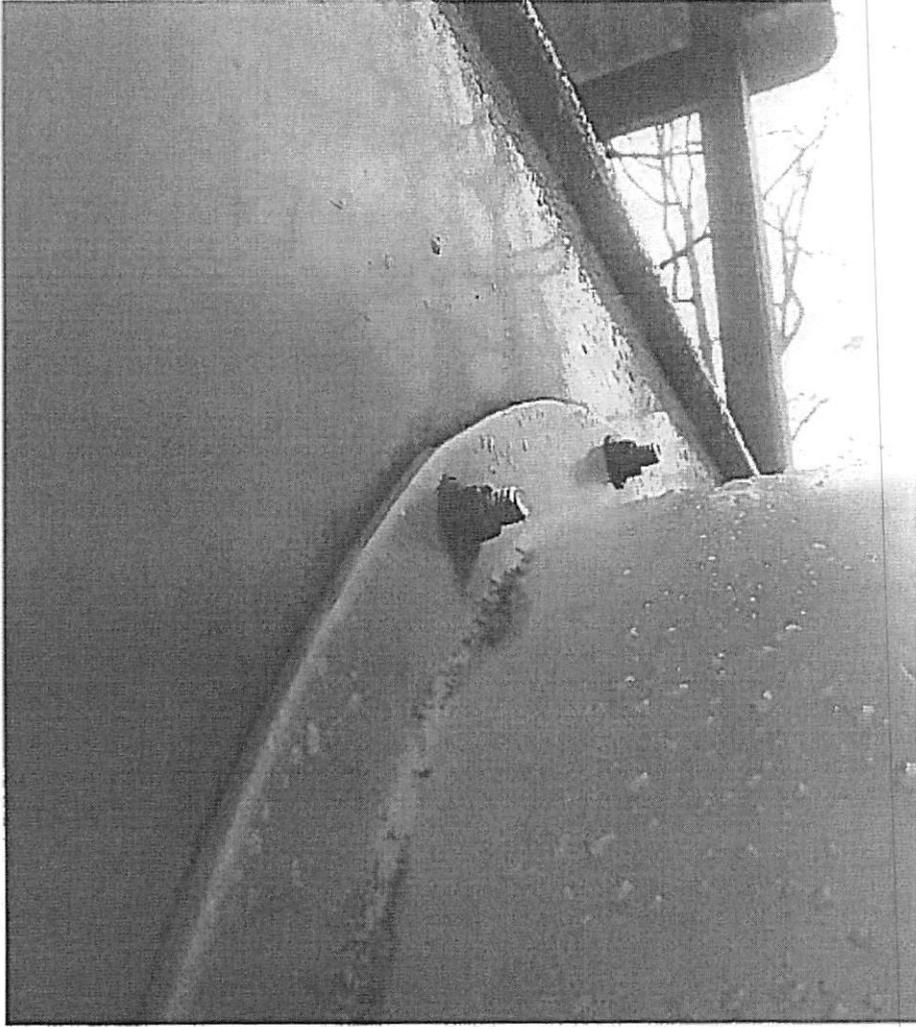
1. Coker Creek Elementary School (CCES)- "S" Hook excessive gap (typical of other locations and sites)



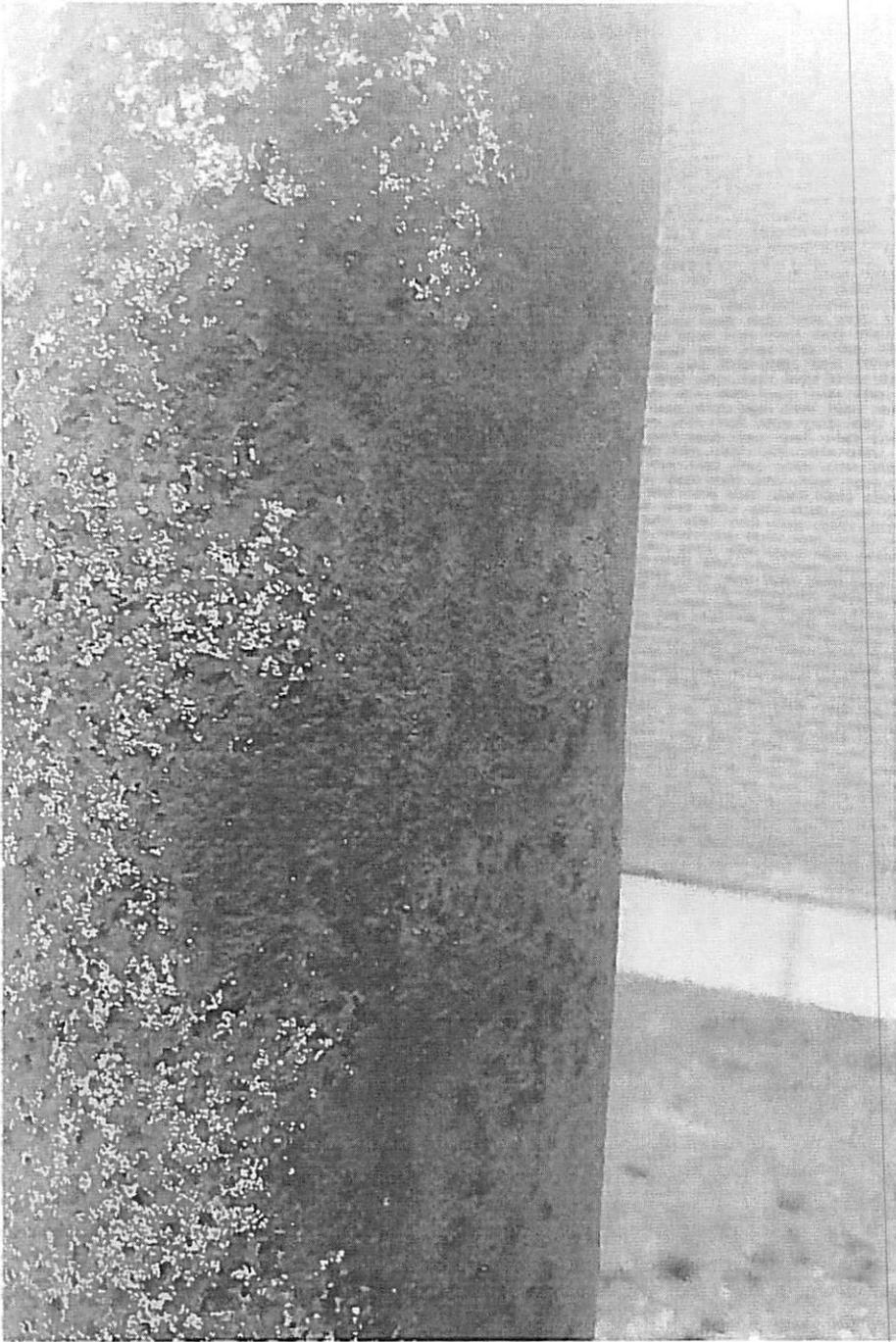
2. CCES- Clatter bridge crush and shear



3. CCES- Bolt protrusion on viewing bubble (typical of other locations and sites)



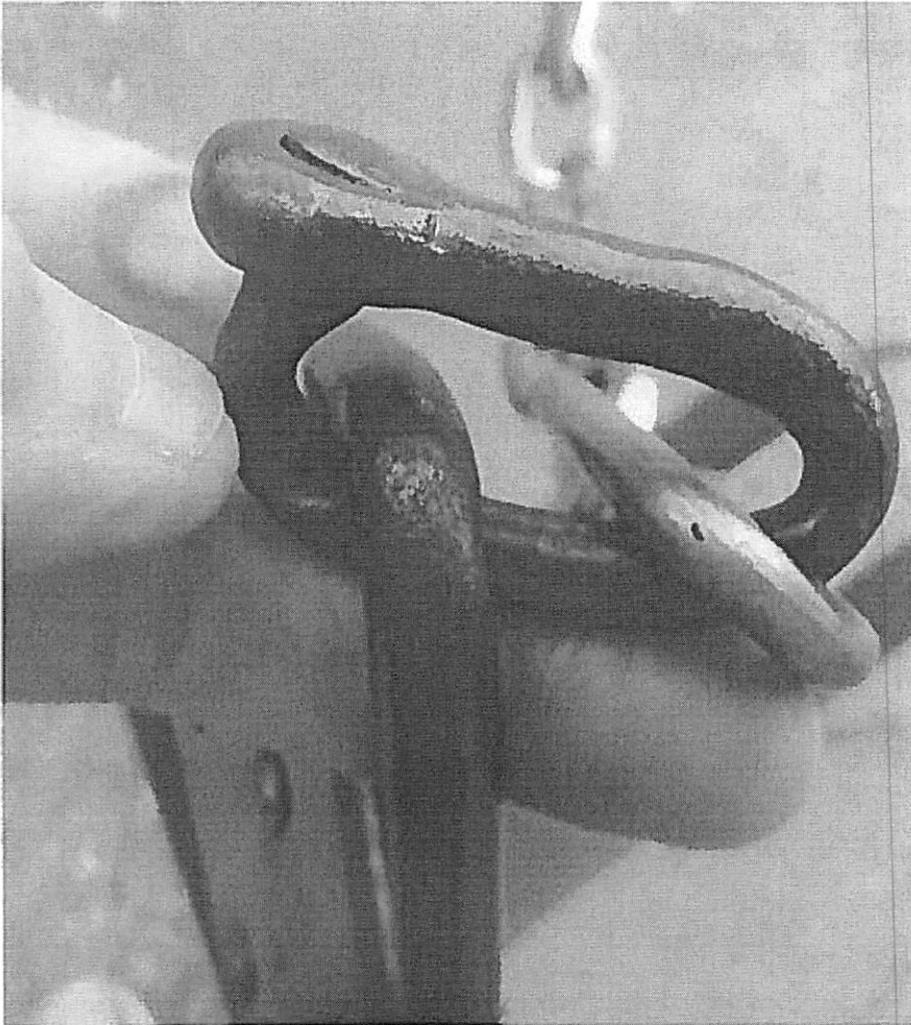
4. Rural Vale Elementary School
(RVES)- Damage/condition to/of
pipe frame assembly on swings



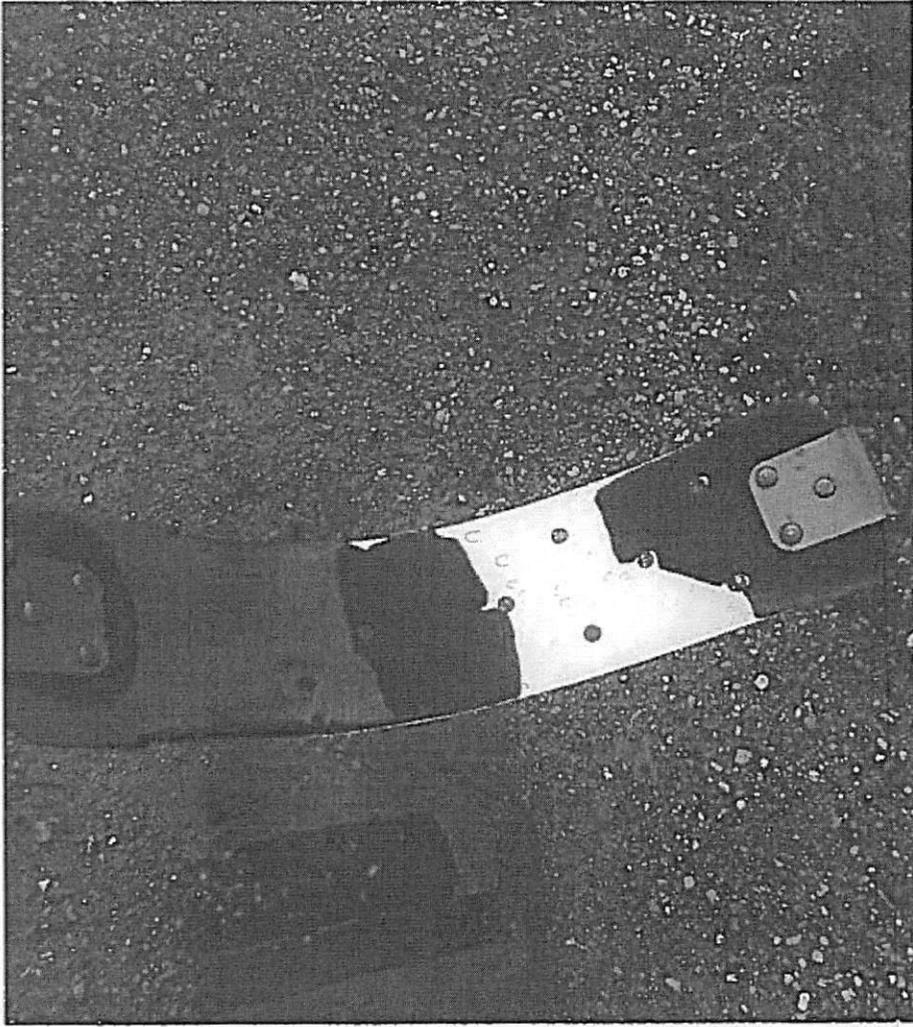
5. RVES- Swing hanger wear
(typical of other locations and sites)



6. RVES- Worn swing attachment hardware (typical of other locations and sites)



7. RVES- Worn and damaged swing seat (typical of other locations and sites)



8. RVES- Small wooden play structure



9. RVES- Spring toys, insufficient use zone





10. RVES- Teeter-totters, absence of shock absorbing material

11. RVES- Picnic tables sitting in swing use zone



12. RVES- Mold on/in transfer tube
(typical of other locations and sites)





13. Tellico Plains Elementary School (TPES)- Pipe style car with no surfacing and exposed footers

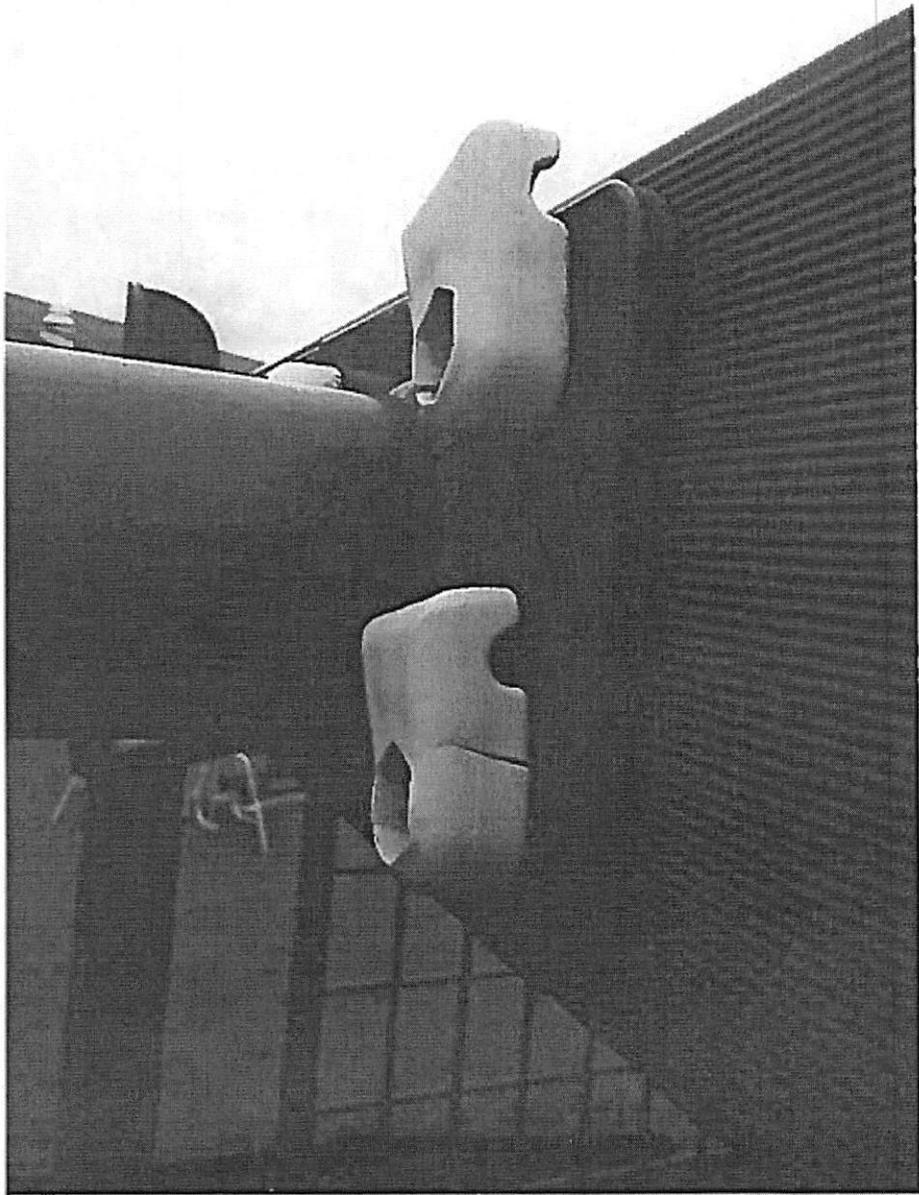


14. TPES- Clatter bridge crush and shear



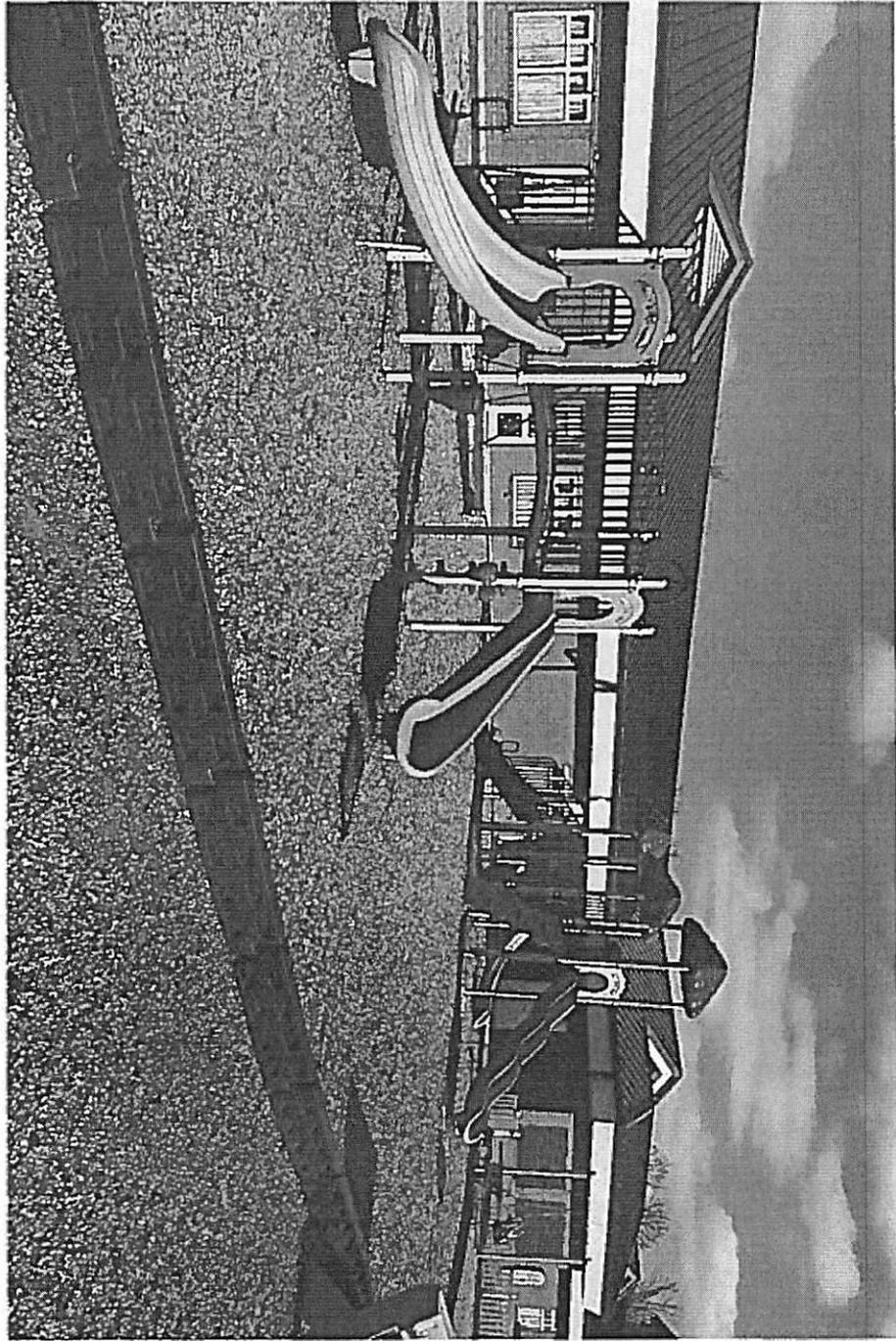
15. TPES- Missing barrier on 54.5"
tall open platform

16. TPES- Upper body horizontal ladder entanglement on deck end attachment

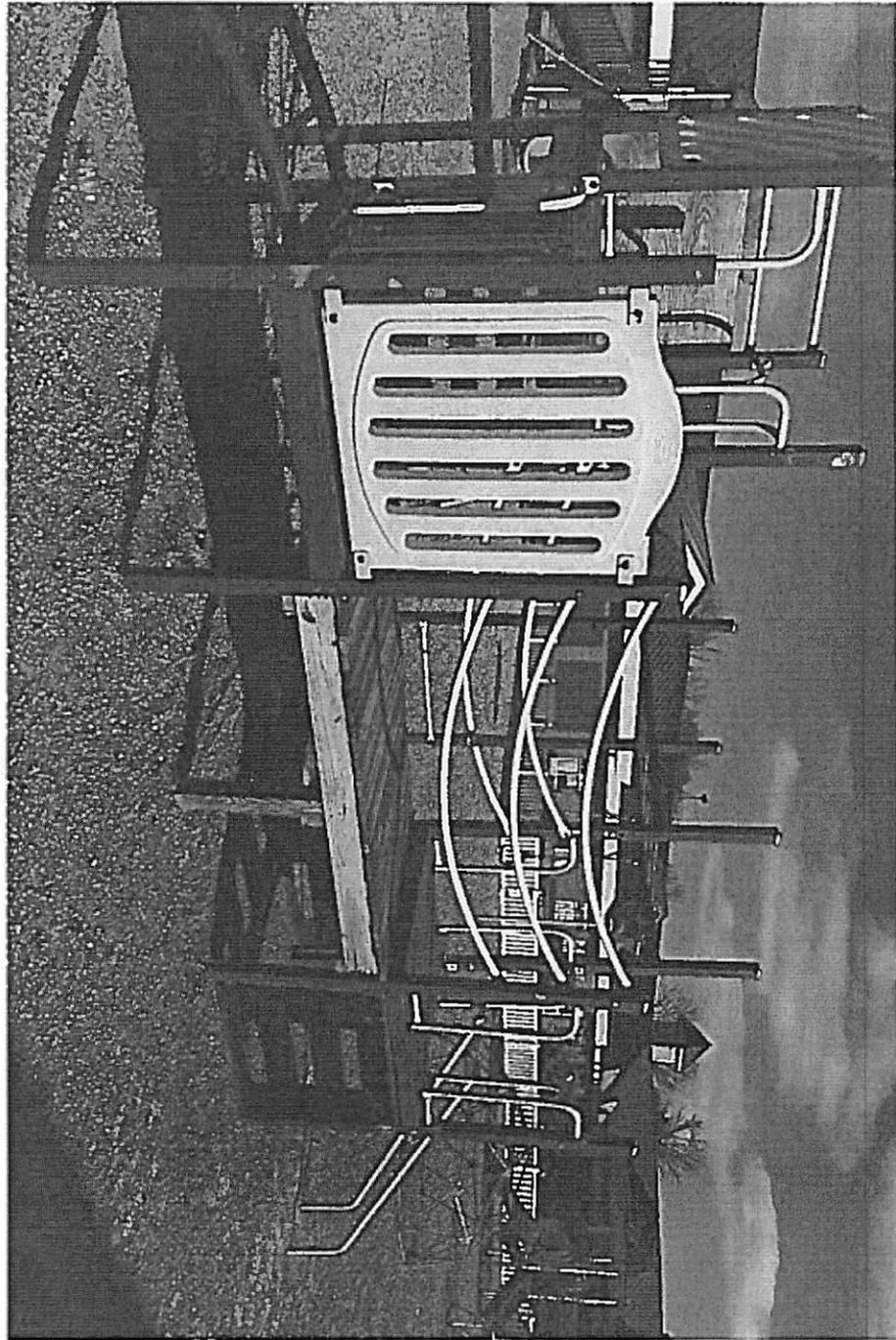




17. TPES- Derelict half-bucket
swing



18. Madisonville Primary School (MPS)- Two probable Miracle Equipment units



19. MPS- Little Tykes Commercial unit by parking lot entrance with home made wooden bridge substituted for OEM clatter bridge

20. MPS- Little Tykes Commercial unit by parking lot entrance with trapeze attached to upper body unit/overhead ladder



21. MPS- Platform wheelchair swing

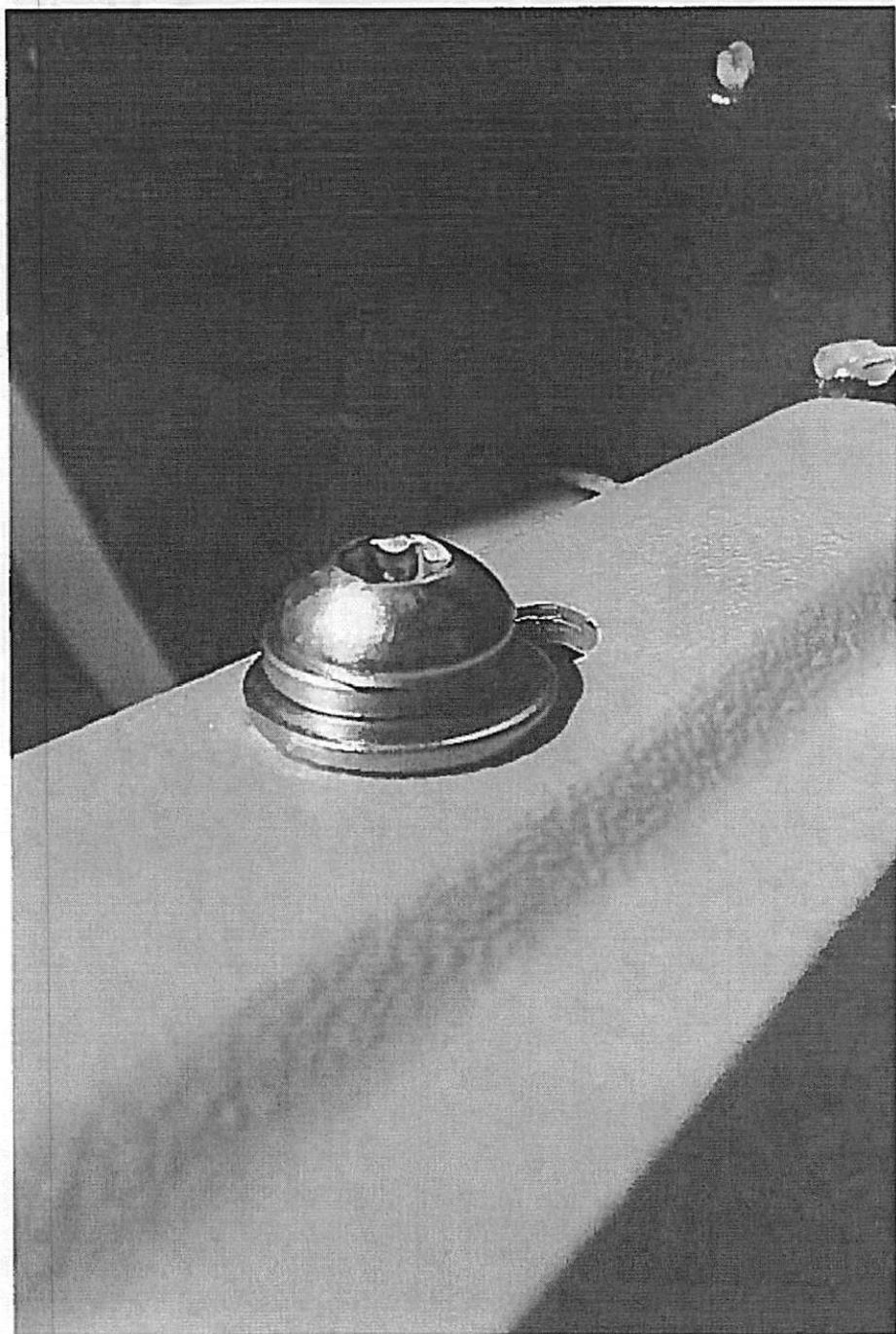


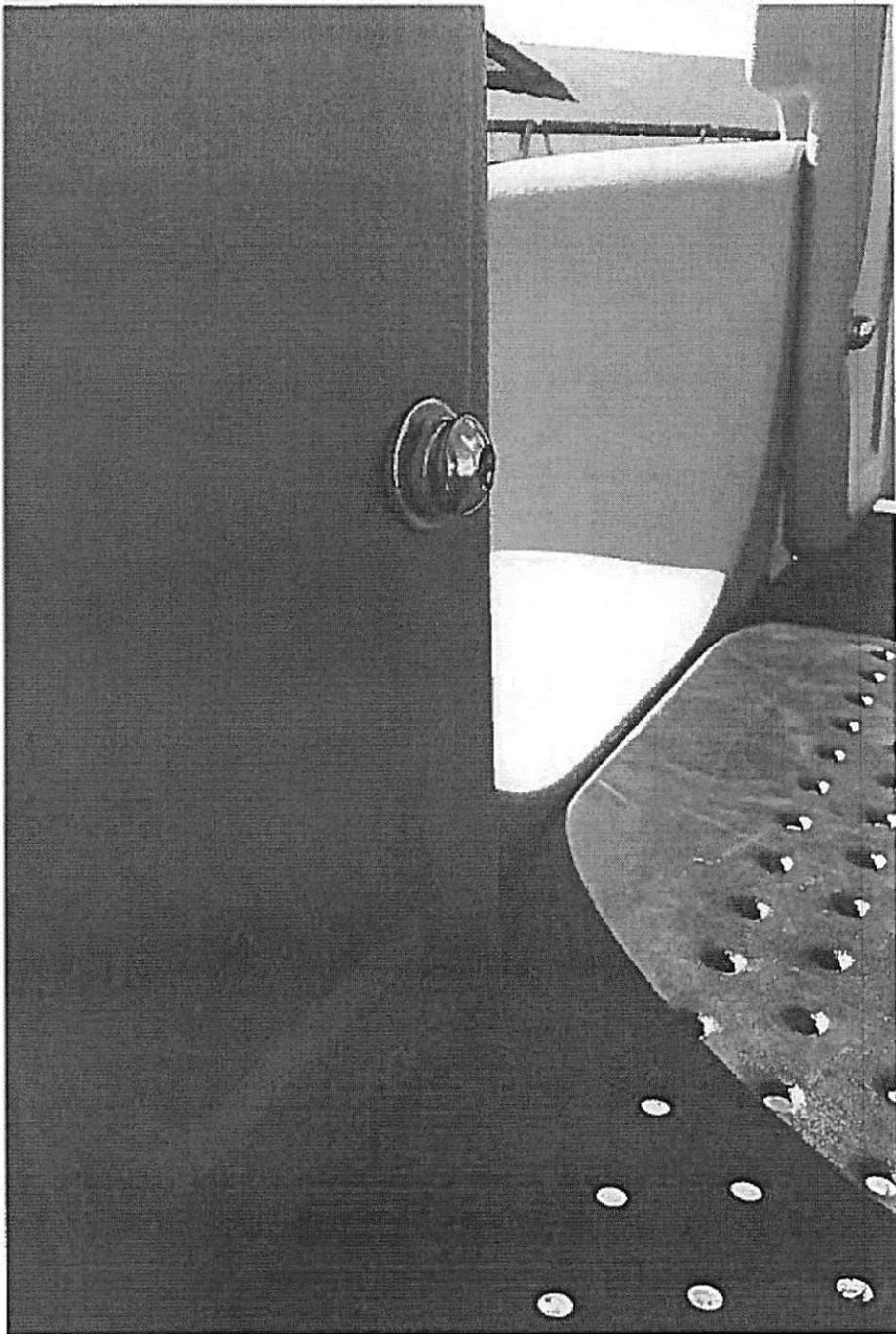
Unit to be Relocated

Platform Wheelchair Swing

Picnic Table to be Moved

22. MPS- Probable Miracle
Equipment slide entry
entanglements photo 1 (typical for
both units and all slides)



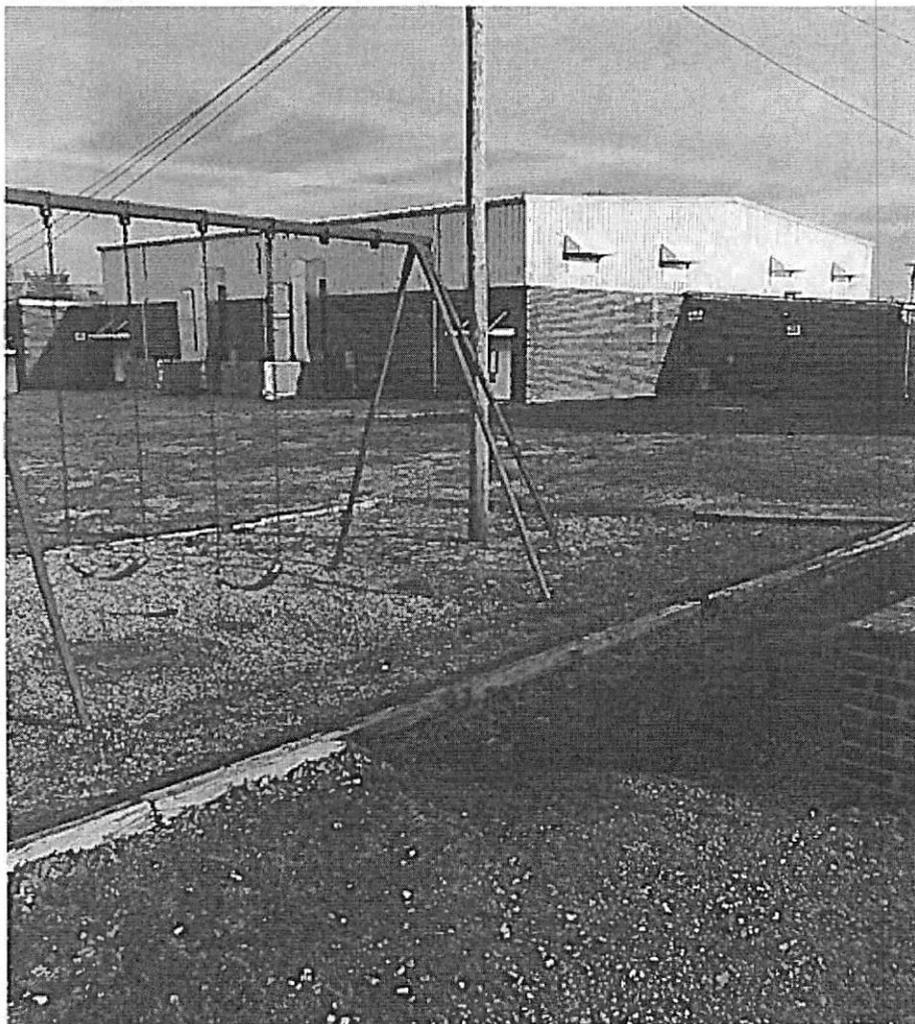


23. MPS- Probable Miracle
Equipment slide entry
entanglements photo 2 (typical for
both units and all slides)



24. Vonroe Elementary School
(VES)- 3 swings in one bay

25. VES- Power pole in swing use zone



27. VES- Swing hanger & "S" hook wear and condition (typical of other locations and sites)

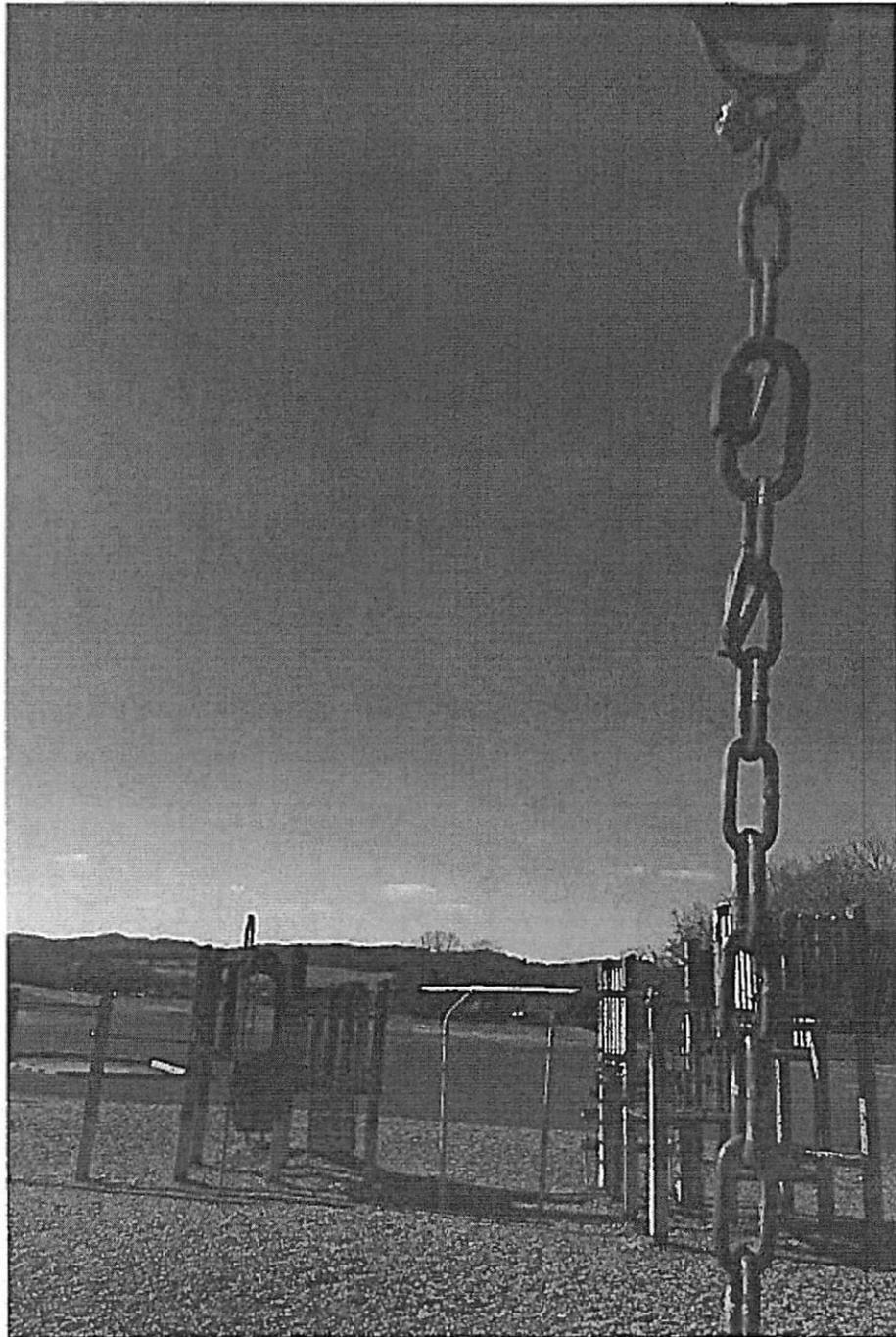




28. VES- Insect damage of wooden structure in pre-kindergarten area

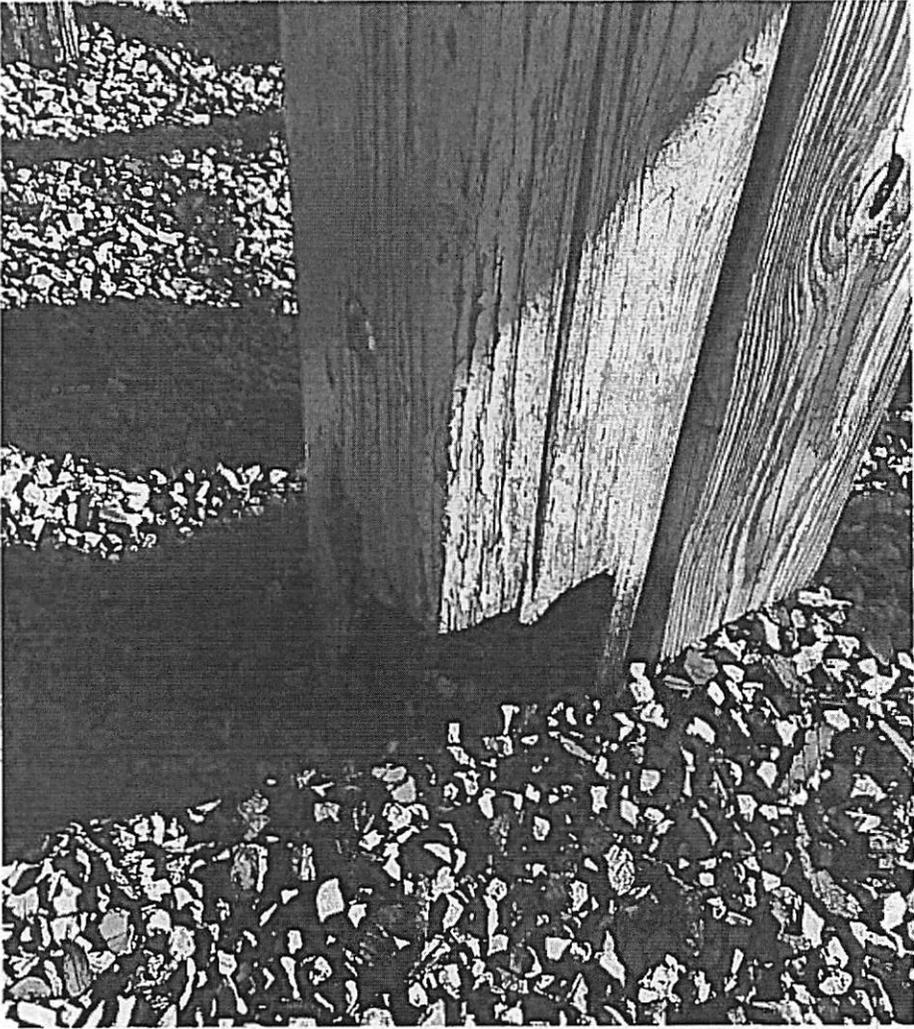
29. VES- Rust on steel portion of wooden structure in pre-kindergarten area





30. Madisonville Intermediate School (MIS)- Swing hanger wear and condition

31. MIS- Condition of wood structure photo 1



32. MIS- Condition of wood structure photo 2

