



**Colorado Special Districts
Property and Liability Pool**

April 13, 2022

Nicholas Carlson
Assistant Public Manager
Roxborough Village Metro

Re: Roxborough - Crystal Lake Park Safety Survey

Nicholas,

This report is in follow-up to the safety survey completed on March 15, 2022. The purpose of the survey was to identify potential safety hazards.

Attached, is a list of safety observations and recommendations based on conditions present at the time of my visit. If you have any questions or require additional information after reading this report, please don't hesitate to contact me.

Sincerely,

Adam Johnsen, CSP

Adam Johnsen, CSP
Safety Management Consultant
Colorado Special Districts Property and Liability
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DISCLAIMER: Observations and recommendations are purely advisory and based on practices and conditions observed and information provided at the time of this survey. Observations and recommendations are not intended to include every loss or accident potential. It's the report recipient's responsibility to make further observations and take whatever action that may be necessary to prevent losses, enforce safety procedures and eliminate hazardous conditions so as to comply with any federal, state, or local law, rule or regulation concerning safety and health.

Report Summary

Report Name: Roxborough - Crystal Lake Park
Completed for: Roxborough Village Metro
Inspection Date: March 15, 2022
Score: 26.9%

Findings:

General Maintenance

Issue Identified **Protective surfacing under and around the equipment is not adequate**
Recommendation *Install/replace surfacing materials. [reference ASTM I 1487, CPSC] [View ASTM Site](#)*

Notes: The height of this play area is 64 plus inches. For this height there should be wood chips as surface material at a minimum. Anything over 4 feet needs to have wood mulch or wood chips at a minimum.

Severity: Moderate (marginal impact)

Contributing Factor: Equipment

Photo(s)



Issue Identified **There is not 9 inches of surface material**
Recommendation *Ensure that there is minimum of 9 inches of surface material. It is recommended that you add enough material to have 12 inches of material so that there is 9 inches after compaction and after material is pushed around. [ASTM F1292] [View ASTM Site](#)*

Notes: There is not quite enough material in this area. There needs to be at least 9 inches of material. Because you do not have someone maintaining the playground weekly you should put a total of 12 inches of material in all areas.

Severity: Moderate (marginal impact)

Contributing Factor: Administrative

Photo(s)



Issue Identified **There is not 9 inches of surface material**

Recommendation *Ensure that there is minimum of 9 inches of surface material. It is recommended that you add enough material to have 12 inches of material so that there is 9 inches after compaction and after material is pushed around. [ASTM F1292] [View ASTM Site](#)*

Notes: More surface material needs to be added to the main playground. Ensure there is a total of 12 inches of material to allow for displacement and compaction.

Severity: Moderate (marginal impact)

Contributing Factor: Equipment

Photo(s)



Positive Finding There are no trip hazards in a use zone

General Upkeep of Playgrounds

Positive Finding The entire playground is free from debris and litter

Positive Finding There are no missing trash receptacles

Positive Finding Trash receptacles are not full

Issue Identified **There are damaged fences, benches, or signs on the playground**

Recommendation *Repair/replace damaged fences, benches, or signs on the playground. [reference ASTM 1487, CPSC] [View ASTM Site](#)*

Notes: The benches have seen better days. Start thinking about re-coating the benches so they stay in good condition.

Severity: Advisory (negligible impact)

Contributing Factor: Equipment

Photo(s)



Issue Identified **Evidence of vandalism present**

Recommendation *Mitigate all evidence of vandalism. [reference ASTM 1487, CPSC] [View ASTM Site](#)*

Notes: The slide looks like it was stabbed with something. Monitor it to make sure it does not get worse.

Severity: Advisory (negligible impact)

Contributing Factor: Equipment

Photo(s)



Issue Identified **The signs used for play areas are not legible or are not in good repair**

Recommendation *Maintain the signs in the park so they are legible and in good repair. [reference ASTM 1487, CPSC] [View ASTM Site](#)*

Notes: The playground is missing signage with rules and age ranges for the different structures.

Severity: Low (minor impact)

Contributing Factor: Administrative

Photo(s)



Equipment: Swings

Issue Identified The swing chains are not in good condition

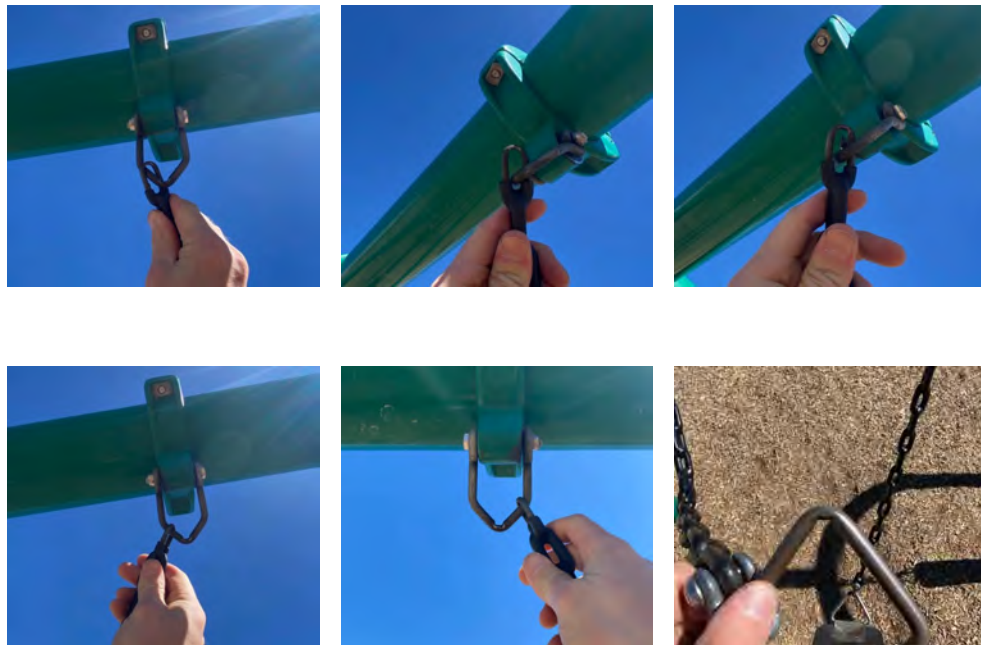
Recommendation Replace or repair the swing chains. [reference ASTM 1487, CPSC] [View ASTM Site](#)

Notes: The swing set chains and brackets are all in VERY poor condition and need to be replaced. 10% of wear is allowed and these swings are more on the 50% of wear. It is only a matter of time before the break.

Severity: Serious/Extreme (deducts 5%)

Contributing Factor: Equipment

Photo(s)



Issue Identified The swing chains are not in good condition

Recommendation Replace or repair the swing chains. [reference ASTM 1487, CPSC] [View ASTM Site](#)

Notes: The top of the tire swing has a broken protective cover. It is split in half. Replace this so that someone does not get a finger smashed.

Severity: Moderate (marginal impact)

Contributing Factor: Equipment

Photo(s)



- Positive Finding There are no loose or missing bolts & nuts on the swing system
- Positive Finding The S-hooks on the swings are properly closed
- Positive Finding The brackets are spaced correctly

Equipment: Composite Structure

- Positive Finding There are no obstructions in the playground use zone
- Positive Finding There are proper guardrails on the structures
- Issue Identified** **There are broken or cracked pieces on the equipment**
- Recommendation** *Repair and or replace broken or cracked pieces on the equipment. [reference ASTM 1487, CPSC] [View ASTM Site](#)*

Notes: The whole side of the playground seems to have shifted causing supports to bend. I am not sure on a solution but i would call in a professional or reach out to the company that installed the playground. It may have been installed incorrectly.

Severity: Serious/Extreme (deducts 5%)
 Contributing Factor: Equipment

Photo(s)



The playground seems to have shifted causing the supports to bend

- Issue Identified** **There are broken or cracked pieces on the equipment**
- Recommendation** *Repair and or replace broken or cracked pieces on the equipment. [reference ASTM 1487, CPSC] [View ASTM Site](#)*

Notes: This handrail has an incomplete weld. This allows water to go inside and it can damage the playground from the inside out. I would try to get it replaced by the manufacturer.

Severity: Low (minor impact)
 Contributing Factor: Equipment

Photo(s)



Issue Identified **There are broken or cracked pieces on the equipment**

Recommendation *Repair and or replace broken or cracked pieces on the equipment. [reference ASTM 1487, CPSC] [View ASTM Site](#)*

Notes: The spinner is broken on the top and needs to be replaced.
Severity: Low (minor impact)
Contributing Factor: Equipment

Photo(s)



Positive Finding There are no entanglements on the structure.
Positive Finding There are no protrusions on the structure
Positive Finding The use zone is adequate, minimum 72 inches

Equipment: Climbing Elements

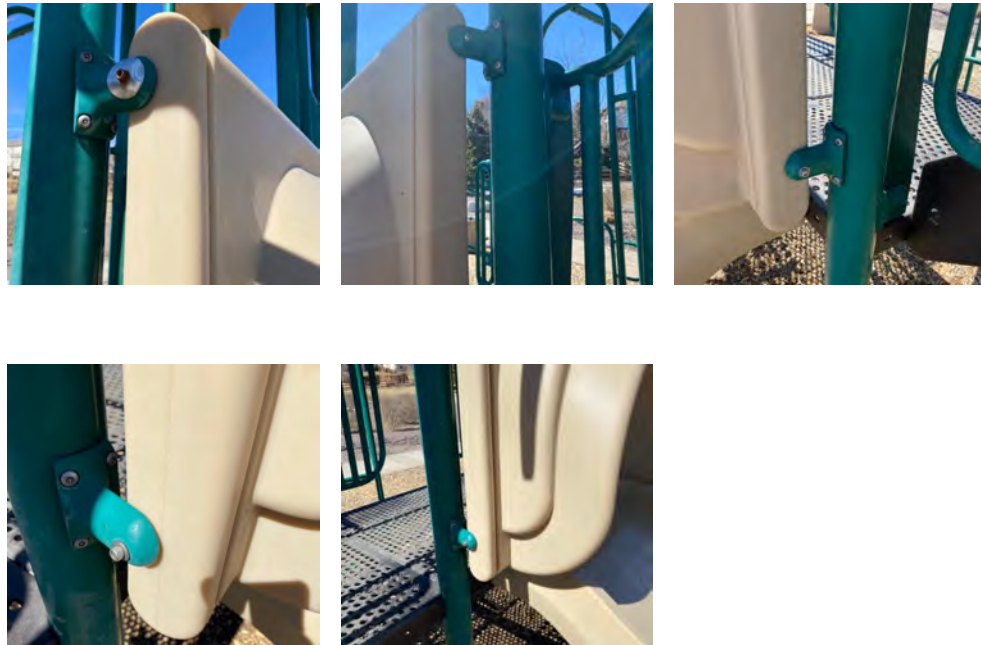
Positive Finding There are no obstructions in the playground use zone

Issue Identified **There are protrusions on the structure**

Recommendation *There are no protrusions on the structure (No more than two threads protruding). [reference ASTM 1487, CPSC] [View ASTM Site](#)*

Notes: Replace the bolts with the proper bolts. Proper screw/bolt is in the last picture.
Severity: Advisory (negligible impact)
Contributing Factor: Equipment

Photo(s)



Issue Identified **There are loose, missing bolts or nuts on the equipment**

Recommendation *Replace and or tighten the nuts in accordance with manufactures instructions. [reference ASTM I 1487, CPSC] [View ASTM Site](#)*

Notes: Lose screw on the main play structure.

Severity: Low (minor impact)

Contributing Factor: Equipment

Photo(s)



Issue Identified **There are loose, missing bolts or nuts on the equipment**

Recommendation *Replace and or tighten the nuts in accordance with manufactures instructions. [reference ASTM I 1487, CPSC] [View ASTM Site](#)*

Notes: Bolt is missing completely and needs to be replaced with the correct manufacturer bolts.

Severity: Serious/Extreme (deducts 5%)

Contributing Factor: Equipment

Photo(s)

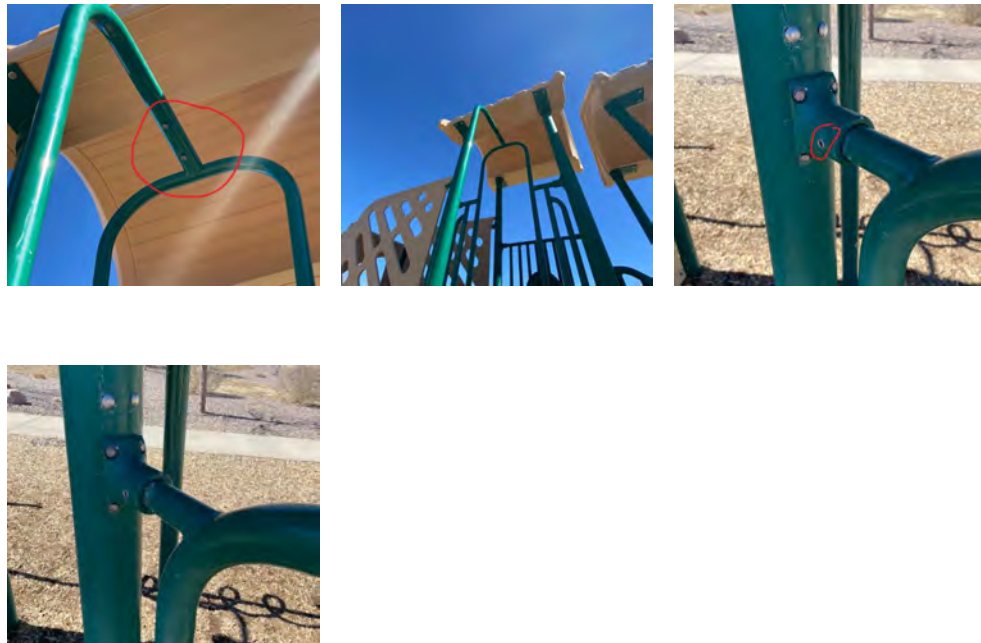


Issue Identified There are loose, missing bolts or nuts on the equipment

Recommendation Replace and or tighten the nuts in accordance with manufactures instructions. [reference ASTM 1487, CPSC] [View ASTM Site](#)

Notes: Lose screw
Severity: Low (minor impact)
Contributing Factor: Equipment

Photo(s)



Issue Identified There are loose, missing bolts or nuts on the equipment

Recommendation *Replace and or tighten the nuts in accordance with manufactures instructions. [reference ASTM 1487, CPSC] [View ASTM Site](#)*

Notes: Lose bolt
Severity: Advisory (negligible impact)
Contributing Factor: Equipment

Photo(s)



Issue Identified **There are loose, missing bolts or nuts on the equipment**

Recommendation *Replace and or tighten the nuts in accordance with manufactures instructions. [reference ASTM 1487, CPSC] [View ASTM Site](#)*

Notes: Replace bolt with the proper bolt and not something from the hardware store.
Severity: Advisory (negligible impact)
Contributing Factor: Equipment

Photo(s)

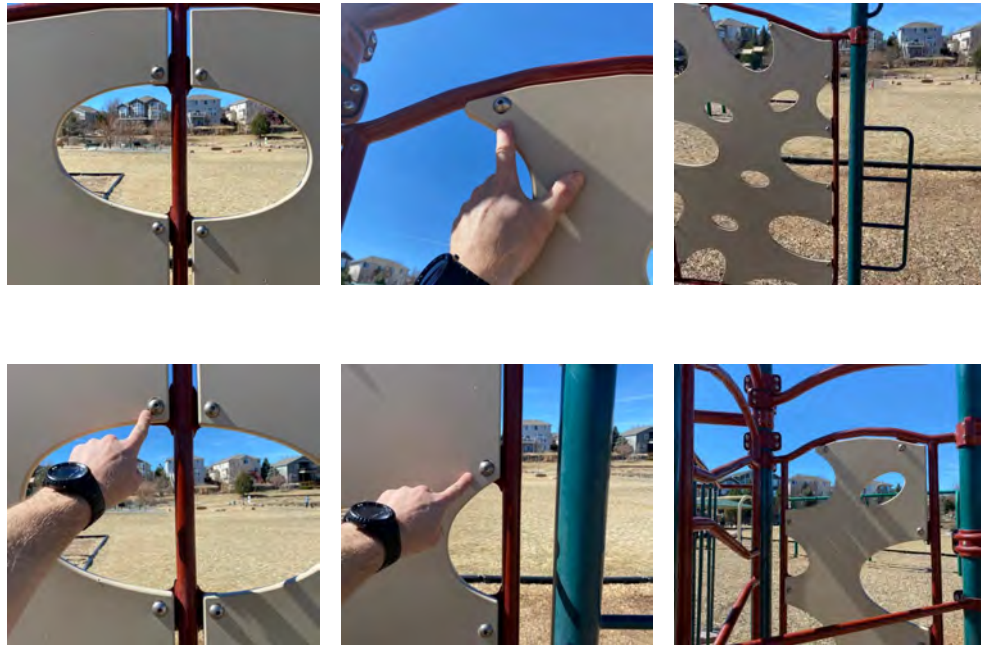


Issue Identified **There are loose, missing bolts or nuts on the equipment**

Recommendation *Replace and or tighten the nuts in accordance with manufactures instructions. [reference ASTM 1487, CPSC] [View ASTM Site](#)*

Notes: The entire structure needs to have the bolts tightened up. There are multiple lost bolts that you do not want to fall out.
Severity: Moderate (marginal impact)
Contributing Factor: Equipment

Photo(s)



Score Summary	#	Severity Summary	Qty
Issues Identified:	18	N/A (Not Assigned)	0
Positive Findings:	13	Advisory (negligible impact)	5
Total Findings:	31	Low (minor impact)	5
Percent Positive:	41.9%	Moderate (marginal impact)	5
Severity Adjustment:	15.0%	Serious/Extreme (deducts 5%)	3
Final Score:	26.9%	Critical/Catastrophic (deducts 10%)	0

Submitted by:
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