



City of Broken Arrow
Minutes
Drainage Advisory Committee

City Hall
220 S 1st Street
Broken Arrow OK
74012

Chair Lori Hendricks
Vice Chair Denise Mason
Member Amber Hamilton
Member Johnnie Parks
Member Donna Wallace
Member Donna Wiedower
Member David Pickel

Monday, July 28, 2025

Time 6:00 p.m.

Council Chambers

1. Call to Order

Chair Lori Hnedricks called the meeting to order at 6:00 p.m.

2. Roll Call

Present: 6 – Amber Hamilton, Donna Wallace, David Pickel, Johnnie Parks, Denise Mason, Lori Hendricks
Absent: 1- Donna Weidower

3. Consideration of Consent Agenda

A. 25-1071 Approval of Drainage Advisory Committee meeting minutes of April 28th, 2025

MOTION: A motion was made by Johnnie Parks, seconded by Denise Mason
Move to Approve Consent Agenda

The motion carried by the following vote:
Aye: 6 - Amber Hamilton, Donna Wallace, David Pickel, Johnnie Parks, Denise Mason, Lori Hendricks

4. Consideration of Items Removed from Consent Agenda - NONE

5. Presentations - NONE

6. General Committee Business

A. 25-1067 Consideration, discussion, and possible action to recommend to City Council to expend funds for drainage improvements adjacent to the Millicent Pond II Subdivision (Case No. 25-011)

Sarah Walters, Stormwater Project Manager, presented an overview of a drainage issue affecting homes along South Joshua Avenue in the Millicent Pond subdivision, located south of Houston Street and east of Olive Avenue. The subdivision, platted in 2008, receives significant off-site stormwater flow—about 18 acres generating roughly 44 CFS—that impacts properties along the subdivision’s edge. A temporary swale and inlet system was installed initially, but the swale has since silted in and deteriorated. There is currently no easement or maintenance obligation, preventing the city from accessing or improving the drainage feature.

Photos showed substantial standing water after rainfall, with reports of water encroaching near property foundations. Ms. Walters emphasized the public benefit of addressing the flooding by directing stormwater into the public drainage system and recommended approval of the project to the committee.

Questioned whether the drainage issues had worsened over time and whether any new development had occurred on the vacant land contributing to the problem, Ms. Walters confirmed there has been no development—only a single house with open field—and that conditions have likely worsened due to lack of maintenance. The original temporary swale has silted in, but there is no documented easement allowing city access for repairs or upkeep. Ms. Walters explained that they are working to secure a temporary easement to enable cleaning and reanalysis, noting that the swale appears to have been an interim measure tied to an unbuilt phase of the subdivision. While the inlet is located within a drainage easement, the swale itself is not, which is unusual and complicates maintenance responsibility.

Steve Curtis, a resident, described the worsening drainage problems behind his property over the past decade. The temporary drainage ditch, originally meant to control runoff, has silted in, become overgrown with tall weeds, and no longer contains water within its banks. He explained that even a moderate rain of half an inch per hour now creates creek-like flow alongside his house, resulting in water up to mid-shin depth. The persistent water issues have led to significant structural damage, including the installation of 16 piers and repairs to his master bathroom. Neighbors on either side have also had to install piers. Mr. Curtis noted that the ditch was initially tied to a planned third phase of the subdivision that was never built, leaving no formal easement and no ongoing maintenance. He expressed frustration that the current property owner has not addressed the problem and said he feels he has no other recourse.

The committee acknowledged Mr. Curtis's concerns and confirmed the drainage issue worsened over time because the temporary swale was never converted into a permanent, maintained channel after the planned third phase of the subdivision fell through. Mr. Curtis had been unable to contact the property owner; attempts by staff had also not yielded a response. Staff explained that resolving the problem would require the property owner's cooperation to allow survey and construction access; otherwise, the city might have to pursue eminent domain. They noted the developer originally responsible was PMC Homes and promised to review historical agreements.

The committee agreed the engineering work could begin even while efforts to reach the property owner continued, since preliminary design could inform negotiations. If the property owner refused, options included code enforcement or acquisition. The commission decided to approve the recommendation to move forward, recognizing immediate relief was needed for affected residents, while still attempting to work cooperatively with the property owner before considering more forceful measures.

**MOTION: A motion was made by Johnnie Parks, seconded by Donna Wallace
Move to Approve Item 25-1067 recommend to City Council to expend funds for
drainage improvements adjacent to the Millicent Pond II Subdivision (Case No. 25-011)**

The motion carried by the following vote:

Aye: 6 - Amber Hamilton, Donna Wallace, David Pickel, Johnnie Parks, Denise Mason, Lori Hendricks

B. 25-1068 Consideration, discussion, and possible action to recommend to City Council to expend funds to mitigate erosion and protect utilities in the Waterford Park Subdivision (Case No. 25-012)

Sarah Walters, Stormwater Project Manager, presented a stormwater and infrastructure issue in the Waterford Park Subdivision, located north of 111th Street and east of Aspen Avenue. A creek runs behind homes in the cul-de-sac where a sanitary sewer line crosses. The line is encased in concrete, but creek erosion has dropped the creek bed one to two feet below the top of the encasement. As water flows against the concrete, it has caused severe erosion—eight to twelve feet—into a resident’s property, exposing the sanitary line and undermining fencing.

Photos showed progressive erosion over just two months, and additional utilities like cables and possibly a gas line are now exposed, creating both infrastructure risk and safety hazards. Staff recommended that the project be forwarded to the City Council for approval to protect the sewer line and address the erosion damage caused by the creek.

The discussion centered on how to address the exposed sanitary sewer line and severe creek erosion behind homes in Waterford Park. Ms. Walters explained that the city’s initial plan is to remove the existing concrete encasement around the sewer line, replace it with a steel casing, backfill and compact the area, and then stabilize it with riprap. This design would reduce the blunt edge that currently catches water and debris. A temporary measure may also be installed soon due to immediate safety concerns, as the property owner has children and the erosion is advancing quickly.

The creek is classified as a Blue Line stream, meaning coordination with the U.S. Army Corps of Engineers and a nationwide permit—likely for utility work or erosion repair—will be required. The project area is owned by two HOAs (Waterford 1 and Waterford 2), and coordination with both will be necessary for access and long-term maintenance responsibilities.

Committee members discussed the potential for debris accumulation around the pipe, noting that regular monitoring will still be required after improvements. The project funding request includes both survey and construction, with design to be handled in-house. Because of the 500 CFS flow during 100-year flood events, the repairs are considered urgent to protect city infrastructure and prevent further property damage.

MOTION: A motion was made by Denise Mason, seconded by Johnnie Parks
Move to Approve Item 25-1068 recommend to City Council to expend funds to mitigate erosion and protect utilities in the Waterford Park Subdivision (Case No. 25-012)

The motion carried by the following vote:

Aye: 6 -

Amber Hamilton, Donna Wallace, David Pickel, Johnnie Parks, Denise Mason, Lori Hendricks

C. 25-1069 Consideration, discussion, and possible action to recommend to City Council to expend construction funds to mitigate the erosion and re-establish the ditch along W. Freeport St. (Case No. 25-013)

Sarah Walters, Stormwater Project Manager, explained that 319 West Freeport Street, located in Broken Arrow’s Old Town area, is experiencing stormwater issues due to changes in drainage patterns. Historically, a swale along Freeport Street carried water away, but it has silted in over time. Additionally, curb and sidewalk improvements along Cedar now divert water down the applicant’s driveway, causing erosion, washing out the driveway, and flooding a shed.

The proposed project is to re-establish the roadside ditch in the public right-of-way to restore proper drainage and prevent runoff from entering the property. The work will also include repairing the damaged driveway caused by public water flow. Ms. Walters noted that the plan is already developed and can be carried out in coordination with the Streets and Stormwater Department. Staff recommended approval of construction funding so the project can proceed.

The committee discussion clarified that the drainage issue at 319 West Freeport Street stems from outdated infrastructure in Broken Arrow's Old Town, where no stormwater design standards existed when the area was originally platted in 1902. Modern improvements, such as the curb and sidewalk on Cedar, unintentionally redirected water down the applicant's driveway. The existing Cowan Group design for nearby Cedar and Iola improvements shows that even with recent upgrades, the 100-year storm flows still exceed capacity, nearly reaching property entrances.

The consensus was that the city cannot feasibly retrofit the area to meet modern 100-year storm standards, but it can address "nuisance flows" that cause localized damage. The plan is to re-establish a swale to keep water in the right-of-way and possibly raise part of the driveway to direct runoff away from the property. Because repairs extend onto private property, the project requires coordination beyond the Streets and Stormwater department alone.

Committee members supported moving the project forward for construction funding, acknowledging it will improve conditions even if it cannot eliminate the extreme flood risk inherent to Old Town's original layout.

MOTION: A motion was made by David Pickel, seconded by Donna Wallace
Move to Approve Item 25-1069 recommend to City Council to expend construction funds to mitigate the erosion and re-establish the ditch along W. Freeport St. (Case No. 25-013)

The motion carried by the following vote:

Aye: 6 - Amber Hamilton, Donna Wallace, David Pickel, Johnnie Parks, Denise Mason, Lori Hendricks

D. 25-1070 Consideration, discussion, and possible action to recommend to City Council to expend design funds for drainage improvements in the Silvertree subdivision (Case No. 25-014)

Sarah Walters, Stormwater Project Manager, explained the flooding issue affecting 1312 West Roanoke in the Silvertree subdivision, located south of New Orleans Street and east of South Aspen Avenue, near New Orleans Square. The subdivision was platted in 1979, prior to modern stormwater design standards, which have contributed to ongoing drainage problems.

Runoff from an approximately 18-acre unplatted tract flows southwest toward a lot owned by PSO (Public Service Company of Oklahoma), known locally as the PSO lot. This runoff collects at the southwest corner and lacks a proper outlet, causing water to drain directly through residential backyards in Silvertree. Residents report that after rain events, water behaves like a small creek, continuing to flow for hours and leaving sediment deposits and soil settlement around patios and pavers.

Photos and videos provided show standing water and saturated ground conditions both in the affected yards and at the PSO lot. Some runoff also reaches Quantico Place, inundating the sidewalk. Ms. Walters noted the scale of water involved is significant, underscoring the need for a solution that accounts for both yard flooding and street impacts.

The discussion confirmed that runoff from the 18-acre tract flows through a PSO-owned lot with a central transmission line and into the Silvertree subdivision yards, causing significant drainage problems that were never accounted for in the original 1979 subdivision plans. The water continues flowing for hours after rainfall, saturating yards and even inundating sidewalks along Quantico Place.

Ms. Walters clarified that the city already holds easements for a water and sanitary line behind the properties, which may allow access for installing new storm inlets to capture the runoff and

tie it into the existing storm sewer along Quantico Place. Coordination with PSO will be required to determine safe work distances from the transmission infrastructure.

The request at this stage is for \$50,000 in design funds to hire a consultant to evaluate options and prepare plans. The long-term solution is expected to involve capturing the off-site runoff into a storm system rather than allowing it to flow through private yards.

MOTION: A motion was made by Johnnie Parks, seconded by Denise Mason
Move to Approve Item 25-1070 recommend to City Council to expend design funds for drainage improvements in the Silvertree subdivision (Case No. 25-014)

The motion carried by the following vote:

Aye: 6 - Amber Hamilton, Donna Wallace, David Pickel, Johnnie Parks, Denise Mason, Lori Hendricks

E. 25-1072 Consideration, discussion, and possible action to recommend to City Council to expend survey and construction funds for drainage improvements along the Indian Springs Golf Course and in the Indian Springs 2nd Addition subdivision (Case No. 25-015)

Sarah Walters, Stormwater Project Manager, outlined the drainage problem affecting Fairway Drive in the Indian Springs Second Edition neighborhood, located south of Jasper Street and west of Lynn Lane. The stormwater system currently collects runoff from the neighborhood and discharges it across the golf course. However, the discharge pipe is in poor condition — exposed, disconnected, and contributing to significant erosion on the golf course.

Only one storm inlet exists on the south side of Fairway Drive, leaving runoff from the north side of the street to pond during rainfall events. This insufficient inlet capacity, combined with the failing downstream pipe, is causing frequent street flooding. The project will likely require replacement of the damaged pipe, additional inlets, and coordination with the golf course to restore proper drainage and address the erosion issue.

The city's role here is significant because the stormwater system in question is a public system that predates modern design standards and easement requirements. Even though no recorded easement exists, the infrastructure serves public drainage for the adjacent residential neighborhood, making it the city's responsibility to repair and maintain it.

The project involves replacing the failing 48-inch metal discharge pipe on the golf course, stabilizing the eroded area, and likely adding an inlet to reduce street flooding on Fairway Drive. Before work can proceed, the city will need to secure an easement from Indian Springs Country Club to access and maintain the drainage improvements in the future legally. Staff indicated that negotiations should be straightforward due to a long-standing cooperative relationship with the club.

The work will use modern materials—most likely high-performance plastic storm pipe (HP Storm)—and may require a new headwall or erosion control measures depending on conditions found during closer inspection. This first phase addresses the immediate structural and flooding issues, with a broader drainage study planned to evaluate long-term solutions for the neighborhood and golf course area.

MOTION: A motion was made by Amber Hamilton, seconded by Donna Wallace
Move to Approve Item 25-1072 recommend to City Council to expend survey and construction funds for drainage improvements along the Indian Springs Golf Course and in the Indian Springs 2nd Addition subdivision (Case No. 25-015)

The motion carried by the following vote:

Aye: 6 - Amber Hamilton, Donna Wallace, David Pickel, Johnnie Parks, Denise Mason, Lori Hendricks

F. 25-1076 Consideration, discussion, and possible action to recommend to City Council to expend construction funds to replace a retaining wall along Liberty Trail (Case No. 25-016)

Charlie Bright, Director of Engineering and Construction, presented the Liberty Trail Wall project, which involves a structurally failing retaining wall located on Oklahoma Turnpike Authority (OTA) property, but supporting a City of Broken Arrow trail. The trail is city-maintained under an agreement with OTA. Still, because the property itself is not city-owned, the repair cannot be funded through standard city bond programs—hence its review by the Drainage Advisory Committee (DAC) and Proposition 6 funding.

The wall failure stems from drainage issues: runoff from the turnpike flows toward the wall, and the original geogrid reinforcement intended to anchor the wall into the slope either washed out or was never properly installed. Over time, this has led to structural compromise, with portions of the wall sliding onto the trail, forcing closure of the segment between Elm Place and Aspen Place.

The proposed solution is full wall reconstruction using a cast-in-place concrete design, which offers greater durability than the current VersaLock system. The plan also includes new drainage improvements—likely inlets or a swale system—to intercept and redirect water beneath the trail into the existing channel and box culvert under the turnpike. These combined measures would stabilize the slope, protect the trail, and allow it to be safely reopened.

The discussion clarified several key points about the Liberty Trail Wall repair project. The City of Broken Arrow did not initially construct the wall in question. It was part of the Oklahoma Turnpike Authority's infrastructure, and the trail was added afterward at the City's request. During construction, geogrid reinforcement specified in the plans was omitted—likely due to OTA's unwillingness to allow excavation near their roadway—leaving the wall structurally vulnerable. Despite this, it lasted about 25 years before failing.

The wall's failure is attributed to poor drainage design; runoff from the turnpike was directed over the top of the wall and trail without proper collection or diversion. The wall is one of the largest of several similar structures along the trail system, though this is currently the only one showing major failure.

The City intends to design the repair in-house, replacing the existing VersaLock wall with a cast-in-place concrete structure and adding drainage improvements to capture and redirect runoff under the trail. Access and constructability pose significant challenges since the site is adjacent to an on-ramp; work may require lane closures on the turnpike.

Originally estimated at \$350,000, the funding request was raised to \$500,000 to account for access complications and the wall's length (approximately 1,000 feet). The project will be bid out this winter, with construction targeted for completion in the spring. The work will be funded from the applicable drainage basin account, though this will significantly draw down available funds until replenished by the next funding cycle.

MOTION: A motion was made by Johnnie Parks, seconded by Denise Mason

Move to Approve Item 25-1076 recommend to City Council to expend construction funds to replace a retaining wall along Liberty Trail (Case No. 25-016)

The motion carried by the following vote:

Aye: 6 - Amber Hamilton, Donna Wallace, David Pickel, Johnnie Parks, Denise Mason, Lori Hendricks

G. 25-1077 Consideration, discussion, and possible action to recommend to City Council to expend design funds for low water crossing improvements along Broken Arrow Creek contingent upon obtaining ownership of the private road (Case No. 25-017)

Sarah Walters, Stormwater Project Manager, explained that this project concerns a private driveway crossing south of Washington and west of Lynn Lane, situated along Broken Arrow Creek within both the floodplain and floodway. The crossing serves a private residence but also conveys runoff from the Oakcrest subdivision to the north, which lacks detention facilities. Nearby, Oakcrest Elementary and Arrowhead Park do include detention, but their basins do not mitigate this particular flow. The gravel driveway at the crossing repeatedly washes out after significant rains, leaving it impassable. Photos presented show the extent of flooding and erosion in the area, illustrating that while the conditions appear severe, they are consistent with the location's floodplain designation.

The project discussed involves a low-water crossing south of Washington and west of Lynn Lane that serves as the only access to a private residence. The crossing lies in the floodplain of Broken Arrow Creek and routinely washes out because runoff from the Oakcrest subdivision, which lacks detention, flows through this area. The drive is privately owned and shared among several property owners, meaning it is not part of the city's street inventory and cannot receive city improvements unless it is dedicated. The applicant has already spent thousands on temporary fixes, but flooding continues, limiting trash collection and emergency access.

Historically, the area developed in the county before annexation and before FEMA standards, and nearby subdivisions had declined previous opportunities to connect roads. Although the house itself sits above the floodplain, the driveway is not, and any permanent fix would require a new structure and coordination with property owners for right-of-way. The committee supported moving forward with a design study to evaluate solutions and engage the property owners, but agreed that construction funding would depend on securing access rights and dedication of the road.

MOTION: A motion was made by Johnnie Parks, seconded by Amber Hamilton
Move to Approve Item 25-1077 recommend to City Council to expend design funds for low water crossing improvements along Broken Arrow Creek contingent upon obtaining ownership of the private road (Case No. 25-017)

Aye: 6 - The motion carried by the following vote:
Amber Hamilton, Donna Wallace, David Pickel, Johnnie Parks, Denise Mason, Lori Hendricks

7. Adjournment

The meeting was adjourned at 7:20 p.m.

MOTION: A motion was made by Donna Wallace, seconded by Lori Hendricks
Move to Adjourn

Aye: 6 - The motion carried by the following vote:
Amber Hamilton, Donna Wallace, David Pickel, Johnnie Parks, Denise Mason, Lori HendricksJ

Chairperson

Deputy City Clerk