

## Sanitary Basis of Design Report – Taco Bell (7901 E. McDowell Rd.)

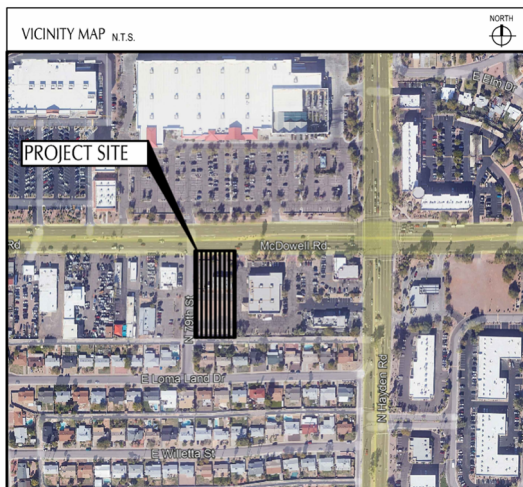
Dear Plan Reviewer,

This report is intended to provide the proposed design criteria for this project with respect to the sanitary sewer utility.

The site is located at 7901. E. McDowell Rd., described as follows (as shown within the ALTA survey documents) as a portion of the northeast quarter of Section 2, Township 1 North, Range 4 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona.

This report accompanies the general utility notes and sanitary sewer notes on Sheet C-001 and the utility plan on Sheet C-131.

The vicinity map of the parcel is as follows:




**FINAL Basis of Design Report**

APPROVED

**APPROVED AS NOTED**

REVISE AND RESUBMIT



**CITY OF SCOTTSDALE**  
**SCOTTSDALE WATER**  
9379 E San Salvador Dr.  
Scottsdale, AZ 85258

Disclaimer: If approved, the approval is granted under the condition that the final construction documents submitted for city review will match the information herein. Any subsequent changes in the water or sewer design that materially impact design criteria or standards will require re-analysis, re-submittal, and approval of a revised basis of design report prior to the plan review submission.; this approval is not a guarantee of construction document acceptance. For questions or clarifications contact the Water Resources Planning and Engineering Department at 480-312-5685.

**BY** Levi Dillon      **DATE** 1/29/2024

all comments here and on utility plan are the same as previous round 4 comments

Approved as-noted comments, address in submitted plans:

- 1) Refer to utility plan comments
- 2) Coordinate existing public sewer and separate parcel sewer services with site layout, underground electrical, etc. Maintain all active services.
- 3) Maintain clean-out at north end of public sewer if/as applicable. DS&PM 7-1.405, H.
- 4) New 6inch min sewer service to be installed for proposed restaurant.
- 5) If sewer remains along any portion of frontage you will need to provide a 6ft wide public sewer line easement to provide access. Previous round comment. DS&PM 7-1.412, 7-1.402, 7-1.409B

### Existing Sanitary Sewer System Conditions

As shown on C-131 (Utility Plan) appended to the end of the report, the existing 8" sanitary main line is located along the west property line. The stub extends to an existing sanitary manhole just southwest of the overall parcel (denoted EX 1 on C-131).

### Proposed Sanitary Sewer System Conditions

The proposed 6" sanitary lines from the building originate from two (2) lines at the rear of the building, one (1) grease laden through the exterior grease interceptor, and one (1) non-grease laden.

Per previous comments, one (1) new manhole is proposed at the existing 8" sanitary main:

1. A new 6" tap is proposed for building use to the new manhole structure.

**Domestic Sanitary Sewer Service**

The preliminary sanitary loading for the building according to preliminary plumbing design is as follows:

<b>SANITARY SEWER LOAD CALC.</b>				
MARK	FIXTURE OR EQUIPMENT	QUANTITY	WASTE	
			WASTE F.U. PER FIX.	TOTAL F.U. PER FIX.
FD-1	FLOOR DRAIN	3	5.0	15.0
HWC-1	ADA WATER CLOSET	2	4.0	8.0
L-1	LAVATORY	2	1.0	2.0
S-1	HAND SINK	3	2.0	6.0
HD-1	HUB DRAIN	2	5.0	10.0
TOTALS				41.0
MAX. WASTE DEMAND AT 41.0 F.U. = 4" SANITARY SEWER WASTE				

Therefore, the minimum service size is 4". According to DSPM 7-1.409, A, the minimum service size is 6". A 6" service will be provided.

According to DSPM Figure 7-1.2 (Average Day Sewer Demand), the total use for a restaurant in GPD is 1.2 GPD per square foot of gross building area with a design peaking factor of 6. The preliminary gross building area for the building is 2281 SF. Therefore, the average sanitary demand is  $1.2 \times 2281 = 2737$  GPD (1.9 GPM). The peak sanitary demand is  $1.2 \times 2281 \times 6 = 16423$  GPD (11.4 GPM).

Please send all direct comments and questions to Josh Graber (GPD Group), at [jgraber@gpdgroup.com](mailto:jgraber@gpdgroup.com), 330.572.3521.

Sincerely,

GPD Group, Professional Corporation

  
 Leonardo A. Sferra, P.E.  
 Director of Site Development



Expires 06/30/2026

