



Preliminary Water Report For Salad and Go - Scottsdale

2323 N. Scottsdale Road
Scottsdale, AZ 85257

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Standage Project 161010



**PRELIMINARY WATER REPORT
FOR
SALAD AND GO - SCOTTSDALE**

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Salad And Go

1. Project Description

The project is a new building and site improvements for a restaurant in an existing retail center. The site is located at 2323 N. Scottsdale Road. The site is approximately 0.54 net acres on the northern approximately 92 feet of Parcel 303-40-990. The remaining southern approximately 59 feet is being split from the parcel and purchased by the property owners to the south. The site is bound to the south by Discount Tire, to the east by an alley way followed by a residential neighborhood, to the north by Smart & Final and to the west by Scottsdale Road.

2. Existing System

There is an existing 12 inch water line running north/south along the west side of Scottsdale Road. This project will connect to this 12 inch line with a 4 inch fire line and a 1 ½ inch water service. Both fire and service lines will run parallel of each other east to the property.

At the time of this report, a fire flow test has been schedule but has not yet been performed. It is currently assumed that the 12 inch main line in Scottsdale Road provides adequate flow for this project, which will be verified in the Final Water Report. There is an existing fire hydrant located north of the site entrance directly north of this site that will meet the fire flow coverage requirement for this site. There are also 2 fire hydrants located across Scottsdale Road from the project site.

3. Proposed System Demands

The Fire Line will include a backflow prevention assembly at the right of way line along Scottsdale Road. The water service line will be connected per City of Scottsdale (C.O.S.) Standard Detail 2330 with a backflow prevention assembly on along the same right of way line.

Fire Protection – The existing 12 inch line will be connected to by a tapping sleeve and valve for a 4 inch fire line, per C.O.S. Standard Detail 2351, which will run east into the property then north to connect to the proposed building. It is currently assumed in this report that there is adequate flow to for the fire protection system. The fire flow requirements per C.O.S. Design Standards & Policies Manual section 6-1.501 is 1,500 GPM and be able to maintain 30 psi minimum pressure under design fire flow requirements (section 6-1.406).

The Final Report will verify there is adequate flow and pressure by performing a fire flow test.

Potable Water – This project will connect to the existing 12 inch line in Scottsdale Road per C.O.S. Standard Detail 2330. There is no addition need for a separate landscape meter, a tee and reduce pressure backflow prevention device will connect to the domestic service line near the building.

Per City of Scottsdale Design Standards & Policies Manual: Figure 6.1-2 Average Day Water Demands, there is proposed building of 748 square feet and 37,868 square feet of outdoor use for a total of 4,685 gallons per day (GPD) which is approximate to 3.3 gallons per minute (GPM). Below is a summary of the anticipated project demands.

Bldg.	Land Use	Inside Use	Unit	Outside Use	Unit	Total
Proposed Demand (Figure 6.1-2 - Design Standards & Policies Manual - City of Scottsdale)						
	Restaurant	748sq.ft.	1.2	37,868sq.ft.	0.1	4,685 GPD
TOTAL AVERAGE DAY WATER DEMANDS IN GALLONS PER DAY						4,685 GPD

All public potable, landscape and fire protection water construction will be in accordance with City of City of Scottsdale, Maricopa County Environmental Services Division, and Arizona Department of Environmental Quality standards. All on-site, private water-related construction and installation will be performed per the most recent release of the International Plumbing Code (IPC).

4. Summary and Conclusions

Basin on the result of our project water demand analysis, it could be concluded that –

- It is currently assumed (and will be verified in the Final Report) that system will adequate to provide the required demand of 1500 GPM at 30 psi for fire protection and 4,685 GPD (3.3 GPM) at 50 psi for the water service.
- The Scottsdale Road's existing infrastructure has adequate capacity for the demands of the new facility.

5. References

- Design Standards & Policies Manual. City of Scottsdale, Arizona. January 2010.
<http://www.scottsdaleaz.gov/design/DSPM>

APPENDIX

AERIAL MAP

PLAN

FIGURE 6.1-2 AVERAGE DAY WATER DEMANDS



Map

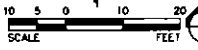


PRELIMINARY GRADING & UTILITY PLAN

APN 131-30-001K LOT 3
ZONING C-3

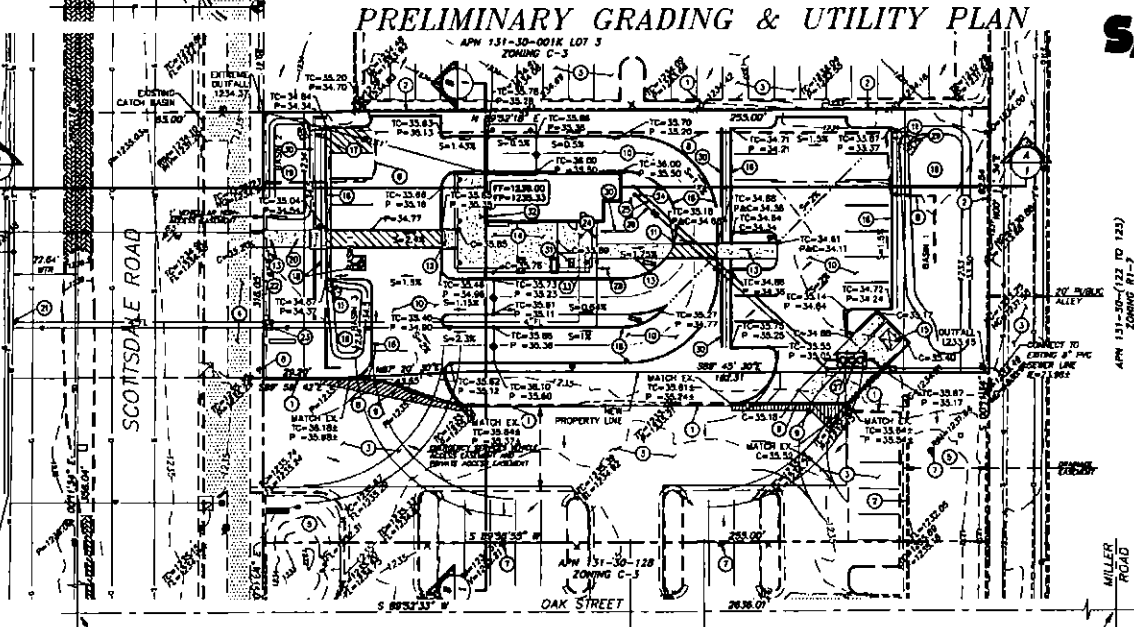


Vicinity Map



Legend

- Section Line
- Street Right-of-Way Line
- Property Line
- Easement Line
- Water Line
- Sanitary Sewer Line
- Electric Line
- Eriect Concrete
- Street Light
- Telephone Pole
- Sanitary Sewer Manhole
- Storm Drain Manhole
- Water Valve
- Fire Hydrant
- Water Meter
- Irrigation Control Valve Box
- Top of Curve Elevation
- Outer Elevation
- Pavement Elevation
- Sidewalk Elevation
- Finish Floor Elevation
- Concrete Elevation
- High Water Elevation
- Right-of-Way
- P.U.E. Public Utility Easement
- Easement



Legal Description:

A PORTION OF LOT 1, OF UNDIV SUBDIVISION PLAT DISCOUNT THE SCOTTSDALE & OAK, SCOTTSDALE, ARIZONA, ACCORDING TO BOOK 10819 OF MAPS, PAGE 42, RECORDS OF MARICOPA COUNTY, ARIZONA.

Owner

SALAD & GO BY AND GO CONCEPTS
FOR WEST ANANDA ARIZONA
CLERKUT, ARIZONA 85021

Developer

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Areas:

GROSS AREA: 0.878 Ac. (28,582 S.F.)
NET AREA: 0.540 Ac. (13,903 S.F.)
(Excludes 65' R/W for SCOTTSDALE RD Ave.)

FEMA Flood Zone:

THIS SITE IS LOCATED IN FLOOD ZONE "X" AS DETERMINED BY FEMA FLOOD MAP# 0401322200A, DATED OCTOBER 18, 2013. ZONE "X" IS DETERMINED AS "AREAS OF 0.2% ANNUAL CHANCE FLOOD AREAS 1:05 ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH AREAS LESS THAN 1 SQUARE MILE. AREAS PROTECTED BY LEVEES FROM 1:05 FLOOD CHANCE."

Benchmark

The Benchmark used for this survey is the West quarter corner of Section 33, Maricopa County (EMCS) 24810-1, being marked by a 2" brass cap in hardware located at the intersection of Scottsdale Road & Oak Street, having an elevation of 1,335.88 feet (NA83/08).

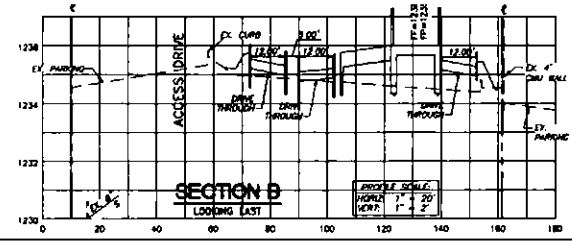
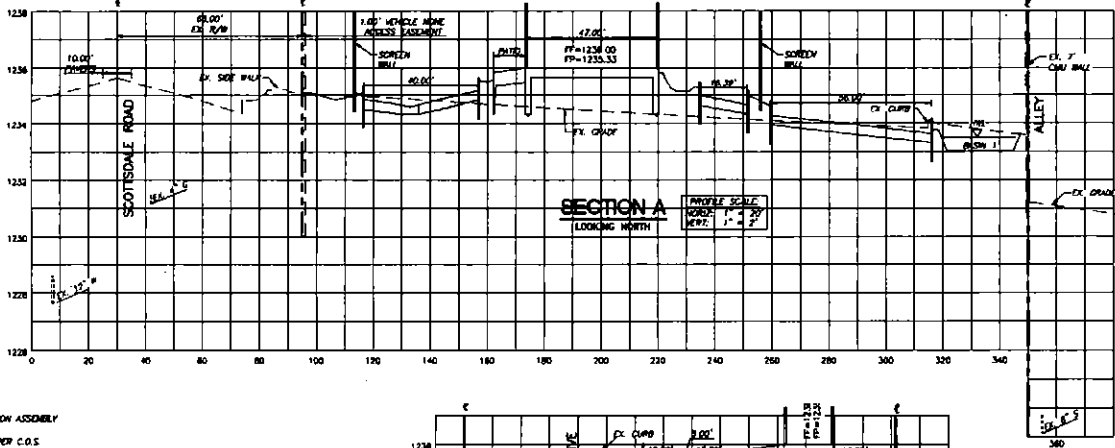
Drainage Statement

THIS PROJECT IS A REDEVELOPMENT PROJECT BY APPROXIMATELY 1/2 ACRE. THE NEW IMPROVEMENTS HAVE MORE IMPROVED AREA THAN THE OLD SITE DID BASED ON AERIAL PHOTOS. BECAUSE OF THIS AND THE SIZE OF THE SITE, NO STORM WATER RETENTION IS REQUIRED FOR THE PROJECT. THREE (3) 6" DEEP BASINS ARE PROVIDED TO COLLECT SOME STORM WATER. THE REAR BASIN WILL OUTFLOW TO THE EXISTING BASIN TO THE SOUTH, AND THERE ARE TWO SHALLOW HOLDING AREAS BY THE FRONT OF THE SITE THAT WILL COLLECT RESURGENCE WATER FROM THE PARKING SPACES. THEN OUTFLOW TO A SMALL EXISTING BASIN TO THE NORTH, THEN OUT THE STREET. THEIR COMBINED CAPACITY IS 1,000 C.F. OPPOSITE STORM WATER RUNOFF IS COLLECTED IN A CITY CATCH BASIN IN FRONT OF THE SITE.

Retention Calculations

Construction Notes

- 1 EXISTING CURB OR CURB & OUTLET TO REMAIN.
- 2 EXISTING CHALK WALL TO REMAIN.
- 3 EXISTING PAVEMENT TO REMAIN.
- 4 EXISTING SIDEWALK TO REMAIN.
- 5 EXISTING BASIN TO REMAIN.
- 6 EXISTING STOP SIGN TO REMAIN.
- 7 EXISTING CATCH BASIN TO REMAIN.
- 8 SURVEIL AND REMOVE EXISTING CURB.
- 9 SURVEIL AND REMOVE EXISTING PAVEMENT.
- 10 CONSTRUCT PAVEMENT PER SOILS REPORT.
- 11 CONSTRUCT 2" CURB OPENING.
- 12 CONSTRUCT SIDEWALK RAMP PER ADA REQUIREMENTS 121-1 MAX SLOPE.
- 13 CONSTRUCT SIDEWALK PER MAG STD DTL 230.
- 14 CONSTRUCT CONCRETE PAVED.
- 15 CONSTRUCT TRUSS ENCLOSURE WITH GROUND CONTAINMENT AREA PER C.O.S. STD DTL 2144-2.
- 16 CONSTRUCT 6" SINGLE CURB w/ CURB & OUTLET.
- 17 CONSTRUCT WALL OPENING.
- 18 CONSTRUCT ADA PARKING STALL WITH ADA STOPPING AND PARKING SIGN.
- 19 CONSTRUCT RETENTION BASIN WITH MAX 4:1 SIDE SLOPE.
- 20 INSTALL 2" WIDE SIDEWALK SCRAPPER PER MAG STD DTL 200.
- 21 INSTALL DRAINING SLEEVE AND VALVE FOR 4" FIRE LINE PER C.O.S. STD DTL 2382-2.
- 22 INSTALL 4" DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY PER C.O.S. STD DTL 2321.
- 23 INSTALL 1 1/2" WATER METER, BOX AND SERVICE LINE PER C.O.S. STD DTL 2330.
- 24 CONNECT TO BUILDING PER PLUMBING MEP PLANS.
- 25 4" GREASE LINE.
- 26 4" SEWER LINE.
- 27 GREASE INTERCEPTOR PER ARCHITECT PLANS.
- 28 INSTALL 3/4" RETICULATED PRESSURE PRINCIPAL BACKFLOW PREVENTION ASSEMBLY AND LANDSCAPE SERVICE LINE PER C.O.S. STD DTL 2353.
- 29 INSTALL RAMP.
- 30 SCREEN WALL.
- 31 BURE ARCH.
- 32 INSTALL BUILDING MOUNTED FDC.



REVISIONS:

PRELIMINARY GRADING & UTILITY PLAN

Standage & Associates, Ltd.
Consulting Engineers

NOT FOR CONSTRUCTION

SHEET: 1 OF 1
PROJECT: 161010

5. Show in calculations that the minimum water pressure requirements are met at the highest proposed finish floor elevation (with and without fire flow).

AVERAGE DAY WATER DEMANDS				
Land Use	Inside Use	Outside Use	Total Use	
Residential Demand per Dwelling Unit:				
< 2 DU/ac	208.9	276.7	485.6	per unit
2 – 2.9 DU/ac	193.7	276.7	470.4	per unit
3 – 7.9 DU/ac	175.9	72.3	248.2	per unit
8 – 11.9 DU/ac	155.3	72.3	227.6	per unit
12 – 22 DU/ac	155.3	72.3	227.6	per unit
High Density Condominium	155.3	30	185.3	per unit
Resort Hotel (includes site amenities)	401.7	44.6	446.3	per room
Service and Employment:				
Restaurant	1.2	0.1	1.3	per sq.ft.
Commercial/Retail	0.7	0.1	0.8	per sq.ft.
Commercial High Rise	0.5	0.1	0.6	per sq.ft.
Office	0.5	0.1	0.6	per sq.ft.
Institutional	670	670	1340	per acre
Industrial	873	154	1027	per acre
Research and Development	1092	192	1284	per acre
Special Use Areas:				
Natural Area Open Space	0	0	0	per acre
Developed Open Space – Parks	0	1786	1786	per acre
Developed Open Space – Golf Course	0	4285	4285	per acre

FIGURE 6.1-2 AVERAGE DAY WATER DEMANDS IN GALLONS PER DAY

6. Pipes and nodes - ID, demand, pressure, elevation, hydraulic grades, length, status, diameter, velocity, headloss / 1000 ft.
7. Reservoirs and pumps - ID, elevation, hydraulic grade, inflow, outflow.
8. PRVs - ID, elevation, upstream and downstream hydraulic grade.
9. Include diagrams clearly showing all water pipe and node references.
10. Pay particular attention to water demand factors used for restaurants or specialty developments.
11. Use scour analysis where surface flows exceed 500 cubic feet per second (cfs).

F. Summary

1. Provide a summary of the proposed water improvements stating that all the city's design standards and policies have been met or indicate any variance or exception. Note why the developer is requesting any variance or exception.
2. Include a brief project schedule indicating the proposed start and completion of the developments improvements.