

QUANTITIES				
GRADING & DRAINAGE		ON-SITE	UNIT	OFF-SITE
GRADING		1,590	SY	78
STORM SEWER PIPE		26	LF	SY
STORM SEWER MANHOLE			EA	EA
UNDERGROUND RETENTION PIPE			LF	N/A
DRYWELL			EA	N/A
SPILLWAY			EA	EA
RIP RAP			CY	CY
CURB OPENING		2	LF	LF
BOX CULVERT			EA	EA
CATCH BASIN/HEADWALL			EA	EA
SCUPPER			EA	EA
IRRIGATION				
IRRIGATION PIPE			LF	LF
IRRIGATION MANHOLE/STRUCTURE			EA	EA
SANITARY SEWER				
MAIN LINE PIPE			LF	LF
SERVICE LINE PIPE			LF	LF
MANHOLE			EA	EA
DROP CONNECTION			EA	EA
UTILITY ADJUSTMENT			EA	N/A
CLEANOUTS			EA	EA
PIPE CONNECTION			EA	EA
PIPE ENCASEMENT			LF	LF
SEWER SERVICE TAP			EA	EA
WATER				
MAIN LINE			LF	LF
WATER SERVICE LINE		N/A	LF	LF
TAPPING SLEEVE			EA	EA
MAIN LINE/LATERAL/FH VALVE			EA	EA
WATER VALVE/MANHOLE/ARV VAULT			EA	EA
FIRE LINE			LF	LF
BLOW OFF/TAPED CAP			EA	EA
METER BOX		N/A	EA	1
BACKFLOW (UPTO 3")			EA	N/A
BACKFLOW 3" AND LARGER			EA	N/A
WATER LINE CONNECTION			EA	EA
UTILITY ADJUSTMENT			EA	N/A
FIRE HYDRANTS			EA	EA
DRY UTILITIES				
OPEN TRENCH IN PAVED R/W		N/A	LF	LF
OPEN TRENCH IN UNPAVED R/W		N/A	LF	LF
BORE ONLY		N/A	LF	LF
BORE/SPLICE PIT		N/A	EA	EA
POTHOLE		N/A	EA	EA
FLAT CONCRETE				
SIDEWALK		3,968	SF	SF
CURB AND GUTTER/SINGLE CURB/RIBBON		580	LF	LF
VALLEY GUTTER AND APRON		N/A	SF	SF
BUS BAY, RT. TURN LANE		N/A	SF	SF
RETURN TYPE DRIVEWAY		N/A	SF	SF
DRIVEWAY (NON-RETURN TYPE)		N/A	EA	1
SIDEWALK RAMP		N/A	EA	N/A
PAVING				
NEW CONC/ASPHALT PAVING		727	SY	SY
ASPHALT/CONC OVERLAY		N/A	SY	SY
SLURRY SEAL/MICRO SEAL		N/A	SY	SY
UTILITY ADJUSTMENT (IN R/W STREET)		N/A	EA	EA
SURVEY MONUMENT		N/A	EA	EA
STREET SIGN		N/A	EA	EA
BARRICADE/GUARDRAIL		N/A	LF	LF
STRIPING (4" EQUIV.)		N/A	LF	LF
ASPHALT/CONC REPLACEMENT		N/A	SY	16
STREET LIGHTS		N/A	EA	EA
TRAFFIC SIGNAL		N/A	EA	EA

RETENTION CALCULATIONS

THE TOTAL AREA OF PROPOSED CONSTRUCTION IS 16,785 SF. A PORTION OF THE EXISTING GRASS RETENTION BASIN AND DECOMPOSED GRANITE AREAS WILL NOW BECOME PART OF THE PROPOSED BUS DROP. THIS WILL RESULT IN AN INCREASED CHANGE IN THE RUNOFF COEFFICIENT (C-FACTOR) FOR THE AREA. THIS WILL INCREASE THE REQUIRED RETENTION BY 658 CF.

THE PRE V/S POST RUNOFF CALCULATIONS ARE BELOW:

PRE-CONSTRUCTION

AREA(GRASS) (C=0.31) 1,084 SF

AREA(D.G.) (C=0.50) 6,416 SF

AREA(CONCRETE)(C=0.95) 9,285 SF

TOTAL AREA 16,785 SF

$C_w(PRE) = 1.084(0.31) + 6,416(0.50) + 9,285(0.95)$

$= 0.74$

POST-CONSTRUCTION

$C_w(POST) = 0.95$

WEIGHTED RUNOFF COEFFICIENT(PRE V/S POST)

$C_w(PRE \text{ V/S } POST) = (0.95 - 0.74)$

$= 0.21$

VOLUME REQUIRED (PRE V/S POST)

$V_R = (C_w)(D/12)*A$

$= (0.21)*(2.24/12)*16,785$

$= 658 \text{ CF}$

VOLUME PROVIDED (PRE-CONSTRUCTION)

EXISTING RETENTION BASIN (AS-BUILT)

H.W.L. AREA = 6,359 SF

BOTTOM AREA = 1,992 SF

DEPTH = 2.11 (AVERAGE)

$V_p = 0.50(6,359 + 1,992)2.11$

$= 8,810 \text{ CF}$

THE PRE-CONSTRUCTION VOLUME CALCULATIONS FOR THE EXISTING RETENTION BASIN IS BASED ON THE AS-BUILT CONDITION AS NO DOCUMENTS OR OLD DRAINAGE REPORTS WERE AVAILABLE AT THE TIME OF OUR DESIGN.

VOLUME PROVIDED (POST-CONSTRUCTION)

A PORTION OF THE EXISTING RETENTION BASIN WILL NEED TO BE FILLED IN TO CONSTRUCT THE NEW BUS DROP. THE EXISTING BASIN WILL BE RE-GRADED TO PROVIDE ADDITIONAL RETENTION OF 658 CF REQUIRED DUE TO THE INCREASED CHANGE IN THE RUNOFF COEFFICIENT AND ALSO TO COMPENSATE FOR THE RETENTION LOST IN THE EXISTING BASIN DUE TO THE PROPOSED CONSTRUCTION. THE BASIN IS MADE DEEPER BY 0.4' AND THE NEW PROPOSED FINISH GRADE OF THE BASIN WOULD BE 14.90.

THE TOTAL VOLUME REQUIRED IN THE RE-GRADED BASIN:

TOTAL  $V_R = V_p$  (PRE-CONSTRUCTION) +  $V_R$  (PRE V/S POST)

$= 8,810 \text{ CF} + 658 \text{ CF}$

$= 9,468 \text{ CF}$

$V_p$  (POST CONSTRUCTION)

H.W.L. AREA = 6,129 SF

BOTTOM AREA = 1,650 SF

DEPTH = 2.51

$V_p = 0.50(6,129 + 1,650)2.51$

$= 9,763 \text{ CF} > 9,468 \text{ CF}$

INSTALLATION OF A NEW BUS DROP OFF

FOR

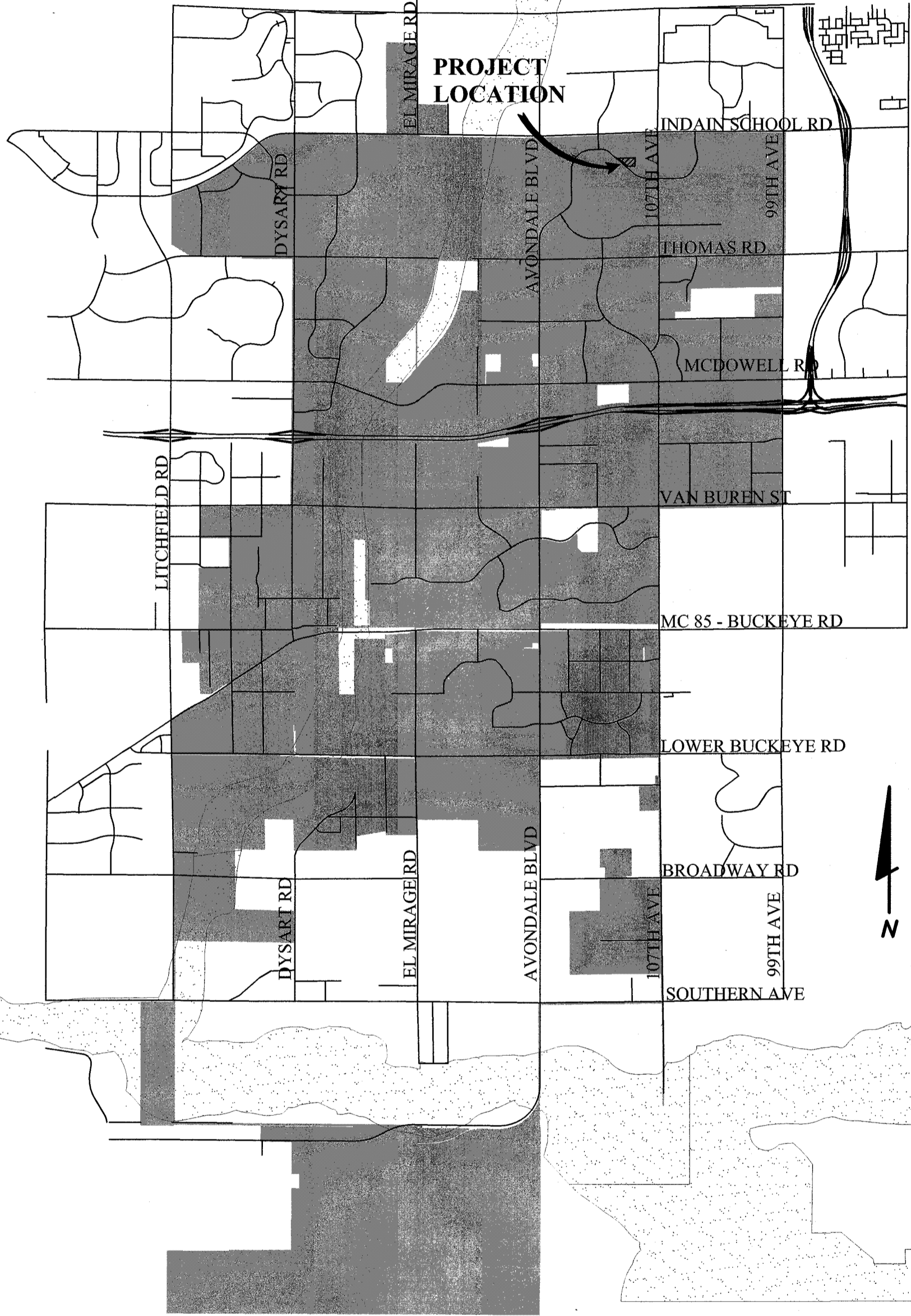
**WESTVIEW HIGH SCHOOL**

10850 WEST GARDEN LAKES PKWY.  
AVONDALE, ARIZONA 85392  
PHONE: (623)478-4200

FOR

**TOLLESON UNION HIGH SCHOOL DISTRICT NO. 214**

9801 WEST VAN BUREN ST.  
TOLLESON, ARIZONA 85353  
CONTACT: JEREMY CALLES  
PHONE: (623) 478-4003



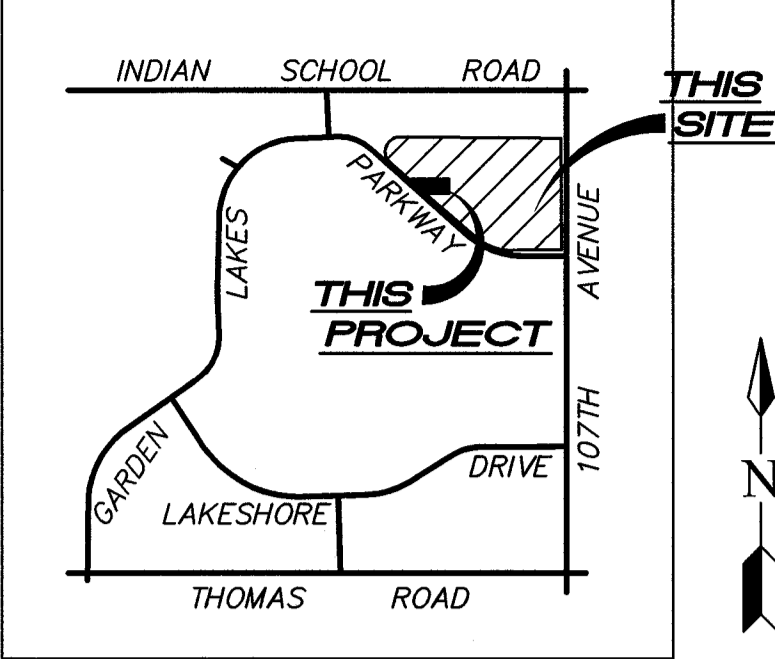
AREA MAP

Storm Water Certification

- ALL DRAINAGE DESIGN WILL COMPLY WITH THE DRAINAGE DESIGN MANUAL FOR MARICOPA COUNTY, ARIZONA, VOLUMES I & II, JANUARY 28, 1996, AS AMENDED OR UPDATED.
- THE DEVELOPMENT WILL PROVIDE ADEQUATE RETENTION FOR THE 100-YEAR 2-HOUR STORM. THIS INCLUDES ONSITE AND ADJACENT HALF STREET RUNOFF.
- IN ALL CASES THE HALF STREET FLOW FROM THE 100-YEAR, 2-HOUR STORM WILL BE CONTAINED WITHIN THE PUBLIC RIGHT OF WAY.
- THE COLLECTION SYSTEM FOR THE 10-YEAR 2-HOUR STORM HAS BEEN DESIGNED SO THAT ALL ARTERIAL AND MAJOR COLLECTOR STREETS SHALL MAINTAIN ONE DRY LANE IN EACH DIRECTION.
- FINISHED FLOOR ELEVATIONS MUST BE MINIMUM OF 14-INCHES ABOVE THE OUT FALL TOP OF CURB ELEVATION, OR 12-INCHES ABOVE THE COMPUTED 100-YEAR 2-HOUR WATER SURFACE ELEVATION WHICH EVER IS GREATER.
- ALL STORM WATER RETENTION SHALL BE DRAINED WITHIN 36 HOURS. IF BASINS DO NOT DRAIN WITHIN 36 HOURS, DEVELOPER/OWNER SHALL ENACT MEASURE TO CORRECT.

SIGNATURE

DATE



VICINITY MAP

LEGEND

- BC 1017.99 EXISTING BACK OF CURB ELEVATION
- SW 1020.05 EXISTING SIDEWALK ELEVATION
- C 1019.90 EXISTING CONCRETE ELEVATION
- P 1018.98 EXISTING PAVEMENT ELEVATION
- G 1016.26 EXISTING GUTTER ELEVATION
- LC 1019.04 EXISTING LANDSCAPE CURB ELEVATION
- TB 1017.26 TOP OF WALL ELEVATION
- TS 1015.21 EXISTING PLANTER ELEVATION
- NG 1020.36 EXISTING FLOWLINE ELEVATION
- CB EXISTING CATCH BASIN
- PB EXISTING PIPE BOLLARD
- ICV EXISTING IRRIGATION CONTROL VALVE
- FH EXISTING FIRE HYDRANT
- WV EXISTING WATER VALVE
- BFP EXISTING BACKFLOW PREVENTER
- WMB EXISTING WATER METER BOX
- AD EXISTING AREA DRAIN
- SSCO EXISTING SANITARY SEWER CLEANOUT
- LKP EXISTING LIGHT POLE
- SSMH EXISTING SANITARY SEWER MANHOLE
- DRY EXISTING DRY WELL
- EB EXISTING ELECTRIC BOX
- JB EXISTING JUNCTION BOX
- SIGN EXISTING SIGN
- TREE EXISTING TREE
- TC=17.75 PROPOSED TOP OF CURB ELEVATION
- G=17.75 PROPOSED GUTTER ELEVATION
- C=19.04 PROPOSED CONCRETE ELEVATION
- F=18.70 PROPOSED FLOWLINE ELEVATION
- PROPOSED CONCRETE SIDEWALK
- PROPOSED 4000 P.S.I. CONCRETE PAVEMENT
- PROPOSED DECOMPOSED GRANITE
- PROPOSED SOD
- DEMOLITION AREA

Utility Conflict Notification Block

THESE PLANS HAVE BEEN SUBMITTED TO THE FOLLOWING UTILITY COMPANIES. WHERE THE WORK TO BE DONE CONFLICTS WITH ANY OF THESE UTILITIES, THE CONFLICTS SHALL BE RESOLVED AS SPECIFIED IN THE SPECIAL NOTES AND/OR AS OTHERWISE NOTED ON THESE PLANS. CONFLICTS ARISING DURING THE COURSE OF CONSTRUCTION FROM UNFORESEEN CIRCUMSTANCES SHALL BE REPORTED TO THE INTERESTED UTILITY COMPANY AND BE RESOLVED BY THEM AND THE DESIGN ENGINEER.

SALT RIVER POWER DISTRICT	03/14/18
ARIZONA PUBLIC SERVICE	03/14/18
CENTURY LINK	03/14/18
COX COMMUNICATIONS	03/14/18
SOUTHWEST GAS	03/14/18
SALT RIVER IRRIGATION DISTRICT	03/14/18
ROOSEVELT IRRIGATION DISTRICT	03/14/18
EL PASO NATURAL GAS	03/14/18

COMPANY REPRESENTATIVE	DATE
CARBY HROBER	03/14/18
COMPANY REPRESENTATIVE	DATE
USIC DISPATCH CENTER	03/14/18
COMPANY REPRESENTATIVE	DATE
USIC DISPATCH CENTER	03/14/18
COMPANY REPRESENTATIVE	DATE
SAUL CARRASCO	03/14/18
COMPANY REPRESENTATIVE	DATE
COMPANY REPRESENTATIVE	DATE
COMPANY REPRESENTATIVE	DATE
COMPANY REPRESENTATIVE	DATE
COMPANY REPRESENTATIVE	DATE

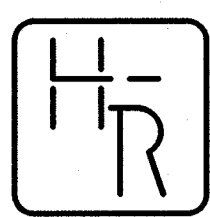
SHEET INDEX:

C-1 COVER SHEET

C-2 GRADING AND DRAINAGE PLAN

NOTE:

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE CITY OF AVONDALE'S SUPPLEMENT TO THE M.A.G. SPECIFICATIONS AND STANDARD DETAILS CURRENTLY ON FILE AND AVAILABLE AT THE CITY OF AVONDALE'S ENGINEERING DEPARTMENT OR ONLINE AT THE CITY OF AVONDALE'S WEBSITE.



HESS - ROUNTREE, INC.  
CONSULTING ENGINEERS & LAND SURVEYORS  
9831 SOUTH 51ST STREET, SUITE C110  
PHOENIX, ARIZONA 85044 (480)496-0244

DES. **DRO** DRN. **ANM** CKD. **DRO** JOB NO. **1712-01**

OWNER

TOLLESON UNION HIGH SCHOOL  
DISTRICT NO. 214  
9801 WEST VAN BUREN STREET  
TOLLESON, ARIZONA 85353  
CONTACT: JEREMY CALLES  
PHONE: (623) 478-4003  
EMAIL: JEREMY.CALLES@TUHSD.ORG

ENGINEER

HESS-ROUNTREE, INC.  
9831 SOUTH 51ST STREET, SUITE C-110  
PHOENIX AZ, 85044  
PHONE: (480) 496-0244  
FAX: (480) 496-0094  
CONTACT: DOUG OSBORN, P.E.  
EMAIL: DOUG@HESSROUTREE.COM

BENCHMARK:

TOP OF BRASS CAP IN HANDHOLE, 0.85 FEET BELOW RIM, AT THE INTERSECTION INDIAN SCHOOL AND 111TH AVENUE .

ELEVATION = 1018.74 (NAVD 88 DATUM)

ELEVATION DATE SHOT: MAY 2014

COA DATUM

CITY OF AVONDALE

MAYOR

KENNETH WEISE

VICE MAYOR

BRIAN KILGORE

CITY MANGER

DAVID FITZHUGH

COUNCIL MEMBERS

PAT DENNIS  
VERONICA MALONE  
MIKE PINEDA

BRYAN KILGORE  
LORENZO SIERRA

CITY CLERK

CARMEN MARTINEZ

APPROVALS

CITY ENGINEERING DEPARTMENT \_\_\_\_\_ DATE \_\_\_\_\_

THE CITY APPROVES THESE PLANS FOR CONCEPT ONLY AND ACCEPTS NO LIABILITY FOR ERRORS OR OMISSIONS.

11465 W. CIVIC CENTER DRIVE  
AVONDALE, AZ 85323  
(623) 333-4200

CITY ENGINEERING DEPARTMENT \_\_\_\_\_ DATE \_\_\_\_\_

REQUIRED FIRE FLOW \_\_\_\_\_ GPM (\_\_\_\_\_ GPM WITH SPRINKLER REDUCTION)

"AS-BUILT CERTIFICATION"

I HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN HEREON WAS OBTAINED UNDER MY DIRECT SUPERVISION AND IS CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR \_\_\_\_\_ SEAL \_\_\_\_\_

REGISTRATION NUMBER \_\_\_\_\_ DATE \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

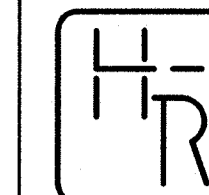
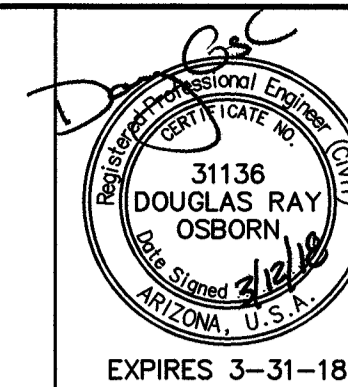
CITY/STATE/ZIP CODE: \_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

COVER SHEET

TOLLESON UNION HIGH SCHOOL DISTRICT			
INSTALLATION OF A BUS DROP OFF AT WESTVIEW HIGH SCHOOL			
DRAWING STATUS	SHEET	OF	
1ST CITY SUBMITTAL SET			
	1	3	C-1
DATE:	03-12-18		





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CONSULTING ENGINEERS & LAND SURVEYORS  
9831 SOUTH 51ST STREET, SUITE C110  
PHOENIX, ARIZONA 85044 (480)496-0244

DES. **DRO** DRN. **ANM** CKD **DRO** JOB NO. **1712-01**

### GRADING AND DRAINAGE CONSTRUCTION NOTES:

1. INSTALL CONCRETE VERTICAL CURB AND GUTTER (MAG STANDARD DETAIL NO. 220-1, TYPE A).
2. INSTALL CONCRETE SINGLE CURB (MAG STANDARD DETAIL NO. 222, TYPE 'A').
3. INSTALL 8" THICK CONCRETE PAVEMENT (4,000 P.S.I. CONCRETE (MAG AA) OVER COMPACTED SUBGRADE).
4. MATCH EXISTING CONCRETE SIDEWALK OR CONCRETE VERTICAL CURB AND GUTTER ELEVATION AND LOCATION.
5. SAWCUT, REMOVE AND REPLACE 2' MINIMUM OF EXISTING A.C. PAVEMENT (MAG SPECIFICATION SECTION 336 AND MAG STANDARD DETAIL NO. 200, "T-TOP", MODIFIED WITH A.B.C. BACKFILL PER MAG SPECIFICATION SECTION 702 AND 601).
6. RELOCATE EXISTING AREA DRAIN AS SHOWN.
7. INSTALL CONCRETE SIDEWALK (MAG STANDARD DETAIL NO. 230).
8. CONSTRUCT CONCRETE DRIVEWAY ENTRANCE (CITY OF AVONDALE STANDARD DETAIL NO. A1255).
9. INSTALL 12" H.D.P.E. DRAINAGE PIPE WITH SMOOTH INTERIOR AND 10.8 P.S.I. JOINTS.
10. CONNECT NEW 12" STORM DRAINAGE PIPE TO EXISTING 12" STORM DRAINAGE PIPE WITH NECESSARY AND APPROPRIATE FITTINGS.
11. CONSTRUCT CONCRETE SPLASHPAD (SEE DETAIL ON THIS SHEET).
12. REPLACE EXISTING GRATE WITH A H-20 RATED GRATE, IF THE EXISTING GRADE CANNOT SUPPORT H-20 LOADING. ADJUST NEW/EXISTING GRATE TO FINISH GRADE.
13. REINSTALL SALVAGED DECOMPOSED GRANITE.
14. INSTALL 6" HIGH X 6" WIDE LANDSCAPE CURB (MAG CLASS 'B').
15. REINSTALL SALVAGED RIP-RAP.
16. STRAIGHT GRADE AT A 4:1 MAXIMUM SLOPE FROM 1" BELOW TOP OF CURB TO MATCH EXISTING GRADE.
17. CONSTRUCT 2-FOOT WIDE CURB OPENING (SEE DETAIL ON THIS SHEET).
18. REMOVE EXISTING 2" BACKFLOW PREVENTER AND RETURN TO THE OWNER. INSTALL COPPER PIPE FROM THE EXISTING COPPER PIPE UPSTREAM AND EXISTING P.V.C. PIPE DOWNSTREAM OF THE EXISTING BACKFLOW PREVENTER.
19. INSTALL H.D.P.E. DRAINAGE PIPE WITH SMOOTH INTERIOR AND 10.8 P.S.I. JOINTS. SIZE TO MATCH EXISTING PIPE SIZE AT AREA DRAIN.
20. CONNECT NEW STORM DRAINAGE PIPE TO EXISTING STORM DRAINAGE PIPE WITH NECESSARY AND APPROPRIATE FITTINGS. CONTRACTOR TO FIELD VERIFY SIZE, ELEVATION AND LOCATION OF EXISTING STORM DRAINAGE PIPE PRIOR TO THE START OF CONSTRUCTION.
21. INSTALL NEW SOD. SOD IS SHOWN ±8 FEET OFF THE EDGE OF PROPOSED CURB OR SIDEWALK AND AT THE BOTTOM OF THE RETENTION BASIN. CONTRACTOR TO INSTALL ADDITIONAL SOD AS NEEDED TO REPAIR OTHER TURF AREAS DAMAGED DURING CONSTRUCTION.
22. REGRADE BASIN PER ELEVATION INDICATED ON PLAN WITH A 4:1 MAXIMUM SIDE SLOPE.

### NOTES:

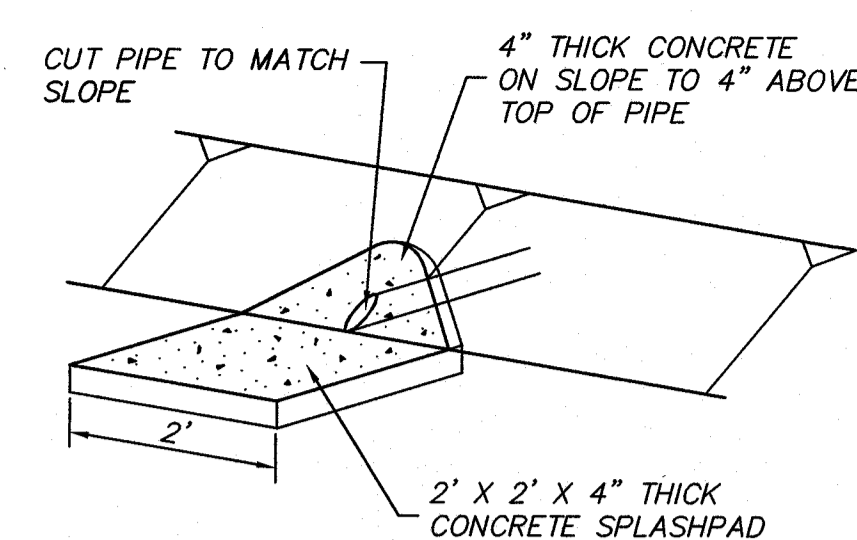
REMOVE EXISTING IRRIGATION SYSTEM WITHIN THE NEW BUS DROP OFF AREA AND CAP AT THE EDGE OF CONSTRUCTION. MODIFY THE EXISTING IRRIGATION SYSTEM AS REQUIRED TO PROVIDE 100% COVERAGE TO ALL TURF AREAS AT THE END OF CONSTRUCTION.

### GRADING AND DRAINAGE PLANS

#### TOLLESON UNION HIGH SCHOOL DISTRICT

#### INSTALLATION OF A BUS DROP OFF AT WESTVIEW HIGH SCHOOL

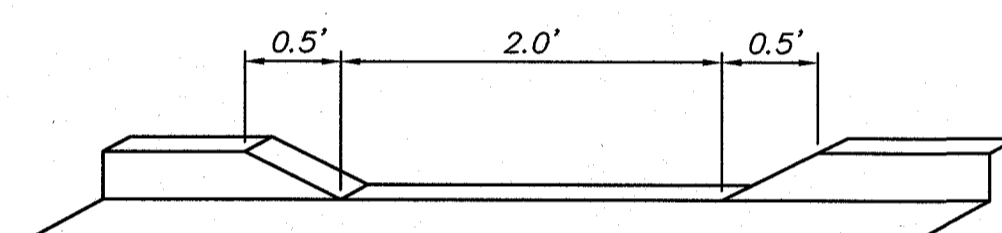
DRAWING STATUS	SHEET	OF	
1ST CITY SUBMITTAL SET	2	2	C-2
DATE:	03-12-18		



**CONCRETE SPLASHPAD**  
NOT TO SCALE

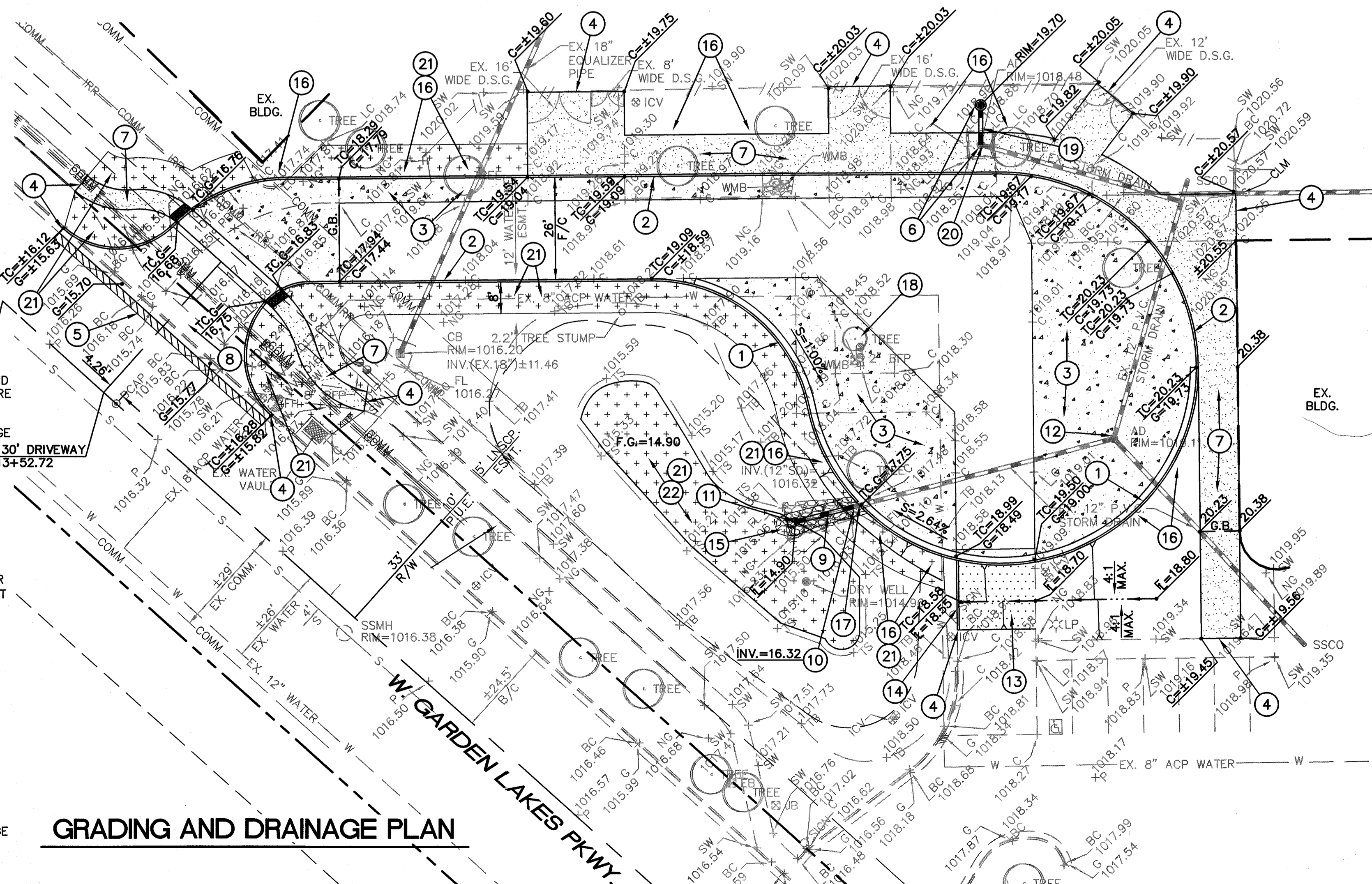
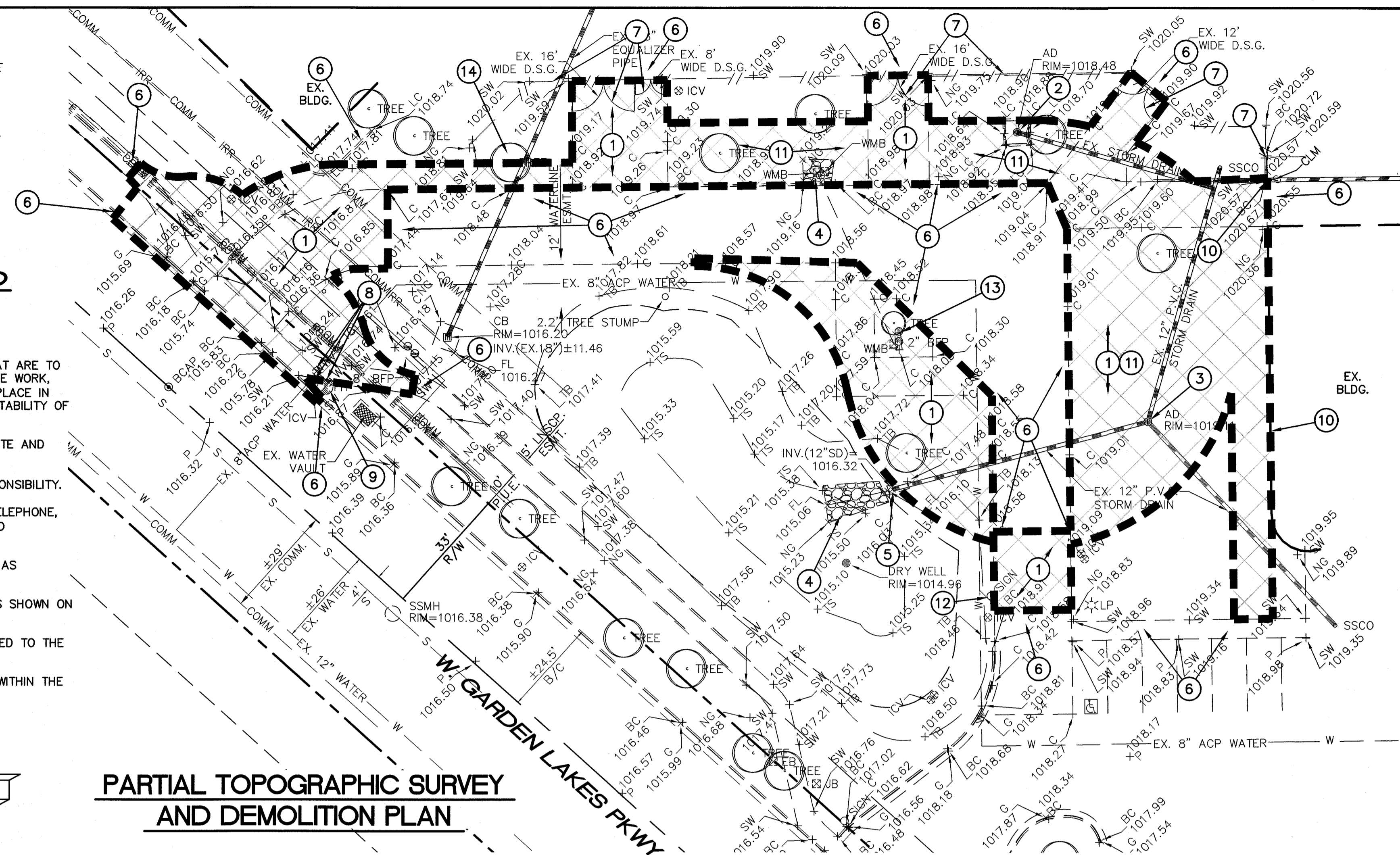
### GENERAL DEMOLITION NOTES:

1. EXISTING STRUCTURES, MATERIALS, LANDSCAPING, ETC., THAT ARE TO REMAIN, WHICH ARE DAMAGED IN THE PERFORMANCE OF THE WORK, ARE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR OR REPLACE IN KIND. THE ENGINEER SHALL BE THE SOLE JUDGE OF ACCEPTABILITY OF REPAIR OR REPLACEMENT.
2. ALL NON-SALVAGE ITEMS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
3. SECURITY AND SAFETY ARE THE CONTRACTOR'S SOLE RESPONSIBILITY.
4. ALL UTILITIES ARE TO REMAIN IN PLACE (WATER, SEWER, TELEPHONE, STORM DRAIN, FLOOD IRRIGATION, GAS, ETC.) UNLESS NOTED OTHERWISE. PROTECT FROM DAMAGE.
5. SAWCUT SIDEWALKS AND CONCRETE AT NEAREST JOINT OR AS DIRECTED BY THE CITY INSPECTOR.
6. SAWCUT ASPHALTIC CONCRETE AT LIMITS OF DEMOLITION AS SHOWN ON PLANS OR AS DIRECTED BY THE CITY INSPECTOR.
7. SALVAGE ITEMS NOT BEING REINSTALLED SHALL BE DELIVERED TO THE DISTRICT MAINTENANCE YARD.
8. ALL SPRINKLER HEADS AND ASSOCIATED IRRIGATION LINES WITHIN THE DEMOLITION AREA SHALL BE RELOCATED AS REQUIRED.



**CURB OPENING DETAIL**  
NOT TO SCALE

### PARTIAL TOPOGRAPHIC SURVEY AND DEMOLITION PLAN



### SPECIFIC DEMOLITION NOTES:

1. WITHIN DEMOLITION AREA, REMOVE AND LEGALLY DISPOSE OF ALL CONCRETE, ASPHALT, A.B.C., CONCRETE SIDEWALKS, WALLS, CURBS, TREES AND ANY IMPROVEMENTS EXCEPT ITEMS NOTED TO REMAIN AND BE PROTECTED OR TO BE REMOVED AND SALVAGED. ALL UTILITIES ARE TO REMAIN AND BE PROTECTED UNLESS NOTED OTHERWISE.
2. EXISTING AREA DRAIN TO BE RELOCATED. SEE GRADING AND DRAINAGE CONSTRUCTION NOTES.
3. CONTRACTOR TO FIELD VERIFY EXISTING AREA DRAIN FOR SALVAGE/REPLACEMENT. SEE GRADING AND DRAINAGE CONSTRUCTION NOTES.
4. REMOVE AND SALVAGE EXISTING RIP-RAP.
5. REMOVE EXISTING CONCRETE SPLASHPAD.
6. EXISTING CONCRETE PAVEMENT AND/OR CONCRETE SIDEWALK AND/OR CONCRETE CURB AND/OR DECOMPOSED GRANITE TO REMAIN. PROTECT FROM DAMAGE.
7. EXISTING FENCE, GATE AND POSTS TO REMAIN. PROTECT FROM DAMAGE.
8. EXISTING WATER VALVES AND/OR IRRIGATION CONTROL VALVES TO REMAIN. PROTECT FROM DAMAGE.
9. EXISTING FIRE HYDRANT TO REMAIN. PROTECT FROM DAMAGE.
10. EXISTING BUILDING OR BUILDING COLUMN TO REMAIN. PROTECT FROM DAMAGE.
11. REMOVE AND SALVAGE EXISTING DECOMPOSED GRANITE.
12. EXISTING SIGN AND POST TO REMAIN. PROTECT FROM DAMAGE.
13. REMOVE EXISTING BACKFLOW PREVENTER. SEE GRADING AND DRAINAGE CONSTRUCTION NOTES.
14. REMOVE EXISTING TREE.

### GRADING AND DRAINAGE PLAN

SCALE: 1"=20'