

DRAINAGE KEYNOTES:

1. INSTALL SINGLE CATCH BASIN PER MAG STD. DTL. 535, TYPE "F".
2. INSTALL HDPE STORM DRAIN PIPE, SIZE, LENGTH, AND SLOPE PER PLAN.
3. INSTALL RIP-RAP SPILLWAY, D50 = 6" THICKNESS = 12", PER DETAIL 6 ON SHEET C-10, LENGTH AND WIDTH PER PLAN.
4. INSTALL MAXWELL DRYWELL BY TORRENT RESOURCES PER DETAIL 7 ON SHEET C-10.
5. INSTALL HDPE ADS N-12 FLARED END SECTION. SIZE AND INVERT PER PLAN.
6. INSTALL ACO S100K 4" TRENCH DRAIN WITH IRON SLOTTED GRATE.

EARTHWORK CALCULATIONS

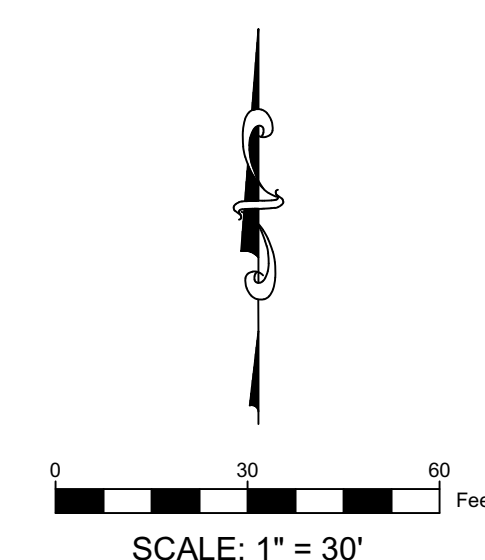
4" CLEAR AND GRUB	6,517 CY
RAW CUT	9,425 CY
20% SHRINK	1,885 CY
REMAINING CUT	7,540 CY
RAW FILL	7,348 CY
TOTAL EXPORT	191 CY
CUT	FILL

NOTES:

1. THE ENGINEER MAKES NO REPRESENTATION OR GUARANTEE REGARDING EARTHWORK QUANTITIES OR THAT THE EARTHWORK FOR THIS PROJECT WILL BALANCE DUE TO THE VARYING FIELD CONDITIONS, CHANGING SOIL TYPES, ALLOWABLE CONSTRUCTION TOLERANCES AND CONSTRUCTION METHODS THAT ARE BEYOND THE CONTROL OF THE ENGINEER.
2. EARTHWORK QUANTITIES WERE CALCULATED USING EXISTING SURFACE ELEVATIONS AND PROPOSED SUBGRADE, HOWEVER FOOTING AND FOUNDATION EXCAVATIONS, TRENCHING, SOIL LOSSES WERE NOT CONSIDERED. SHRINK AND SWELL WAS ASSUMED TO BE 20%. CONTRACTOR TO NOTIFY ENGINEERING IF CONDITIONS CHANGE DURING GRADING OPERATIONS.
3. PROPOSED SUBGRADE ASSUMPTIONS ARE 12" THICK BASE UNDER BUILDING FOOTPRINTS, AND 8" THICK PAVEMENTS IN PARKING LOTS. 4" CLEAR AND GRUB WAS ASSUMED OVER THE ENTIRE SITE.
4. EARTHWORK CALCULATION INCLUDES THE ENTIRE AREA OF IMPROVEMENT.

LEGEND:

---	LIMITS OF CONSTRUCTION	FG	FINISHED GRADE ELEVATION
---	CHDPE STORM DRAIN PIPE	C	CONCRETE ELEVATION
---	GRADE BREAK	P	ASPHALT PAVEMENT ELEVATION
---	HWE	EX	EXISTING GRADE ELEVATION
---	HIGH WATER ELEVATION	FF	FINISHED FLOOR ELEVATION
---	DRAINAGE ARROW	TC	TOP OF CURB ELEVATION
---	SCUPPER	G	GUTTER ELEVATION
---	DRYWELL	SW	SIDEWALK ELEVATION
---	CATCH BASIN	HWE	HIGH WATER ELEVATION
---	FLARED END SECTION	TW	TOP OF WALL
---	NEW RIP-RAP		



CONSTRUCTION DOCUMENTS



REV.

AFUHS TRANSPORTATION CENTER

COTTON LANE
GOODYEAR, AZ

DESIGNED: JLP
DATE: NOV. 8, 2021
DRAWN: SAW
PROJ. 21-102
SCALE: 1" = 30'

GRADING AND DRAINAGE PLAN

DWG. NO.

C-04.1

MATCHLINE SEE SHEET C-04.2