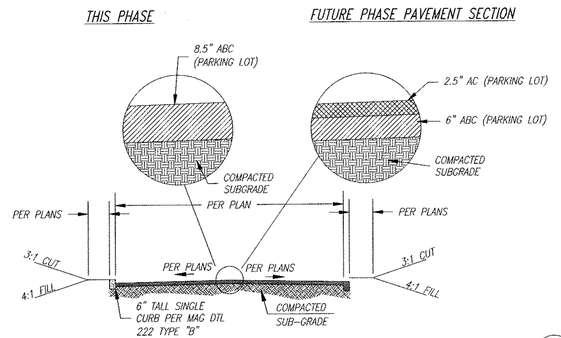
GENERAL NOTES:

THIS NOTE APPLIES TO THE PARKING LOT SECTION.

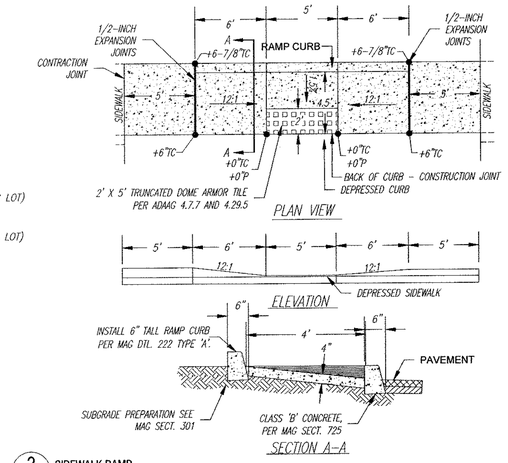
1. PAVEMENT SECTIONS ARE PER WESTERN TECHNOLOGIES INC. REPORT NO. 3129JUS056 DATED 10-20-09 AND REPORT NO. 3129JUS075 DATED 1-12-10
2. FOR THIS PHASE ALL STREETS WILL CONSISTS OF A.B.C. ONLY
3. A.B.C. PER MAG SPEC SECTION 310 (100% DENSITY).
4. SUBGRADE PER MAG SPEC SECTION 301 (95% DENSITY).
5. ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH MAG SPECIFICATIONS AND THE GEOTECHNICAL INVESTIGATION UNLESS SPECIFICALLY NOTED OTHERWISE.



1 NTS **PARKING LOT SECTION**

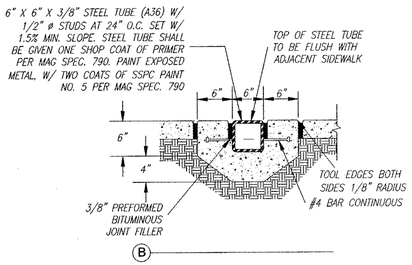
FOR THIS PROJECT:

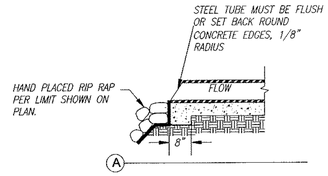
1. PARKING LOT SECTIONS WITHIN PASSENGER CAR PARKING AREAS AND DRIVES SHALL CONSIST ONLY OF 8.5" A.B.C.

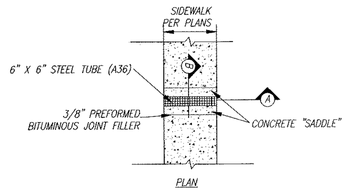


2 NTS **SIDEWALK RAMP**

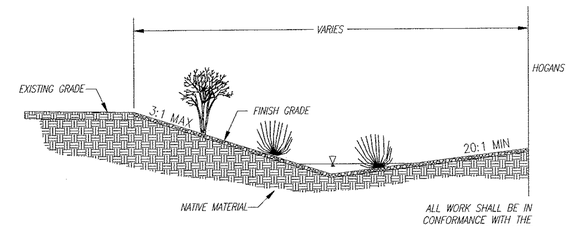
SECTION A-A SHOWS CURB DETAIL



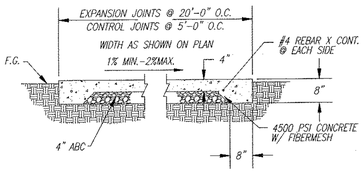




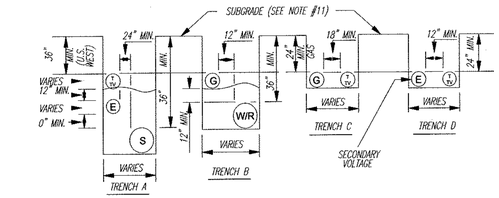
3 NTS **6" SIDEWALK SCUPPER**



4 NTS **TRIANGULAR SWALE**



5 NTS **TYPICAL SIDEWALK DETAIL**



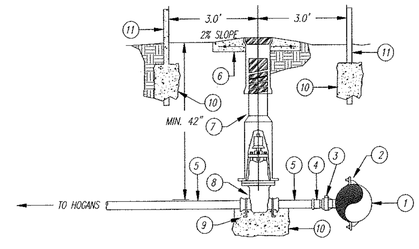
LEGEND

T	COMMUNICATION
G	NATURAL GAS
E	ELECTRICAL
W	POTABLE WATER
S	SEWER
R	RECLAIMED WATER

NOTES:

1. THE DIMENSIONS GIVEN IN THESE TRENCH DETAILS ARE MINIMUM. DEPENDING ON THE NUMBER AND SIZE OF UTILITIES IN A TRENCH, ADDITIONAL COVER AND/OR CLEARANCES MAY BE REQUIRED.
2. MINIMUM COVER SHALL BE MEASURED FROM THE TOP OF THE PIPE TO THE SUBGRADE UNDER EXISTING OR PROPOSED PAVEMENT. IN AREAS THAT ARE NOT TO BE PAVED, MINIMUM COVER SHALL BE MEASURED FROM FINISHED GRADE.
3. MINIMUM HORIZONTAL DISTANCE BETWEEN WATER AND SEWER PIPES IS 6 FEET.
4. WHEN SEWER AND WATER LINES CROSS, REFER TO ARIZONA DEPARTMENT OF ENVIRO-MENTAL QUALITY (A.D.E.Q.) GUIDELINES, MAG STANDARD SPECIFICATION SECTION 610.5 AND MAG STD. DTL. 404.
5. WHILE POWER AND COMMUNICATION CABLES MAY BE INSTALLED IN SANITARY SEWER TRENCHES, A SEPARATE TRENCH MAY BE REQUIRED WHEN DEEMED NECESSARY BY UTILITY COMPANIES.
6. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY PRIOR TO WORK WHERE PROPOSED SEWER ENCROACHES UTILITY LINES.
7. WATER AND ELECTRIC POWER LINES ARE NOT ALLOWED IN THE SAME TRENCH.
8. GAS AND SEWER LINES ARE NOT ALLOWED IN THE SAME TRENCH.
9. CONTRACTOR SHALL CALL NTUA TWO WORKING DAYS PRIOR TO TRENCHING.
10. TRACER WIRE'S SHALL BE INSTALLED IN ACCORDANCE WITH TRENCHING AND BACKFILL DETAIL.
11. WHEN POWER AND COMMUNICATION CABLES ARE NOT IN THE SAME TRENCH, THEY SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 36" FROM WATER LINES AND 24" FROM SEWER LINES, AND SHALL MAINTAIN A MINIMUM OF 12" ABOVE SEWER LINES. WHEN GAS LINES ARE NOT IN THE SAME TRENCH, A MINIMUM HORIZONTAL SEPARATION OF 36" FROM SEWER LINES AND 18" FROM WATER LINES SHALL BE MAINTAINED; GAS LINES SHALL ALSO BE A MINIMUM OF 18" ABOVE WATER LINES. ALL MEASUREMENTS SHALL BE MADE FROM THE OUTSIDE EDGE OF PIPE OR CABLE.
12. MINIMUM DEPTHS FOR POWER, GAS, TELEVISION, AND COMMUNICATION ARE MEASURED FROM FINISHED GRADE.
13. ALL WATERLINES (FIRE HYDRANT LEAD LINES, FIRE LINES AND SERVICE LINES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 3').

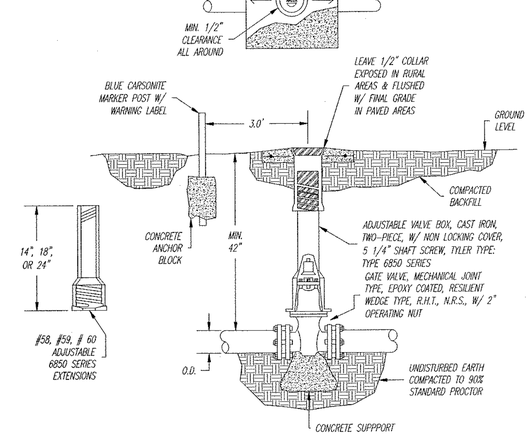
6 NTS **UNDERGROUND UTILITIES TYPICAL LOCATION AND TRENCH DETAIL**



MATERIAL LISTING		
ITEM	QUAN	DESCRIPTION
1	--	PIPE, 6" OR LARGER, EXISTING
2	1	SADDLE, BRASS, PIPE SIZE & TYPE X 2" FIPT TAP, 6" AND LARGER
3	1	CORPORATION STOP, 2" MIPT X 2" FIPT, MUELLER B-20046
4	1	ADAPTER, PVC, CL 200, SDR-21, 2" GASKET X 2" MIPT
5	A.R.	PIPE, 2" PVC, SDR-21, BELL & SPIGOT
6	A.R.	CONCRETE COLLAR, 24" SQUARE X 4" THICK, W/ #4 REBARS, E.W.O.C., INSCRIBED W/LINE SIZE AND FLOW DIRECTION
7	1	VALVE BOX, C.I., 2-PIECE, 5.25" SHAFT, SCREW TYPE, TYLER 6850 SERIES W/LID
8	1	GATE VALVE, 2", RESILIENT SEAT WEDGE, 5 X S, NRS, RHT, 3" OPERATING NUT-MUELLER A2360-37
9	A.R.	REBAR, #4, CUT AND SHAPE AS NEEDED
10	A.R.	CONCRETE ANCHOR BLOCK, 1.5 C.F. MIN. (DO NOT COVER JOINTS OR BOLTS
11	A.R.	BLUE CARSONITE MARKER POST W/ "WATERLINE WARNING" DECAL

7 NTS **2" WATER SERVICE**

SIMILAR TO NTUA STANDARD DRAWING WS-2

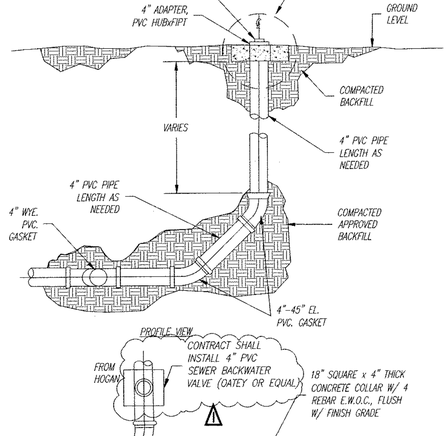


NOTES:

1. IF APPROPRIATE, USE SERIES 2000 PV MEGALUG GLANDS FOR SDR-21, PVC TO SECURE GATE VALVE(S) TO OTHER FITTINGS/PIPE, USE OTHER MEGALUGS FOR DIFFERENT OUTSIDE DIAMETER PIPE/TYPE.
2. DO NOT COVER JOINTS AND BOLTS WITH CONCRETE
3. SEE WS-13 FOR APPROPRIATE LOCATION OF MARKER POST.

8 NTS **WATER MAIN VALVE INSTALLATION**

NTUA STANDARD DRAWING WS-14

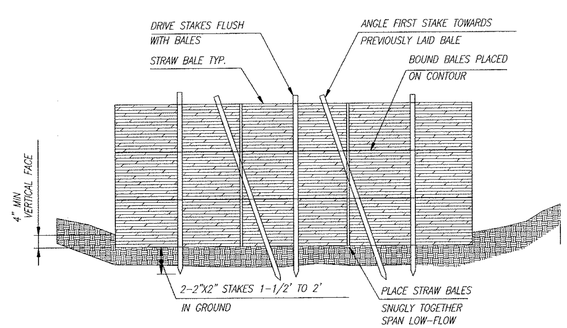


9 NTS **4" SEWER CLEANOUT DETAIL**

NTUA STANDARD DETAIL DRAWING WWS-12

STRAW BALE SEDIMENT TRAP DETAIL

1. STRAW BALES SHALL BE OF UNIFORM SHAPE AND SIZE AND SHALL BE FREE OF ANY INORGANIC MATTER.
2. LINE OF BALES MAY MEANDER TO AVOID DISTURBANCE OF EXISTING VEGETATION.
3. SUBSEQUENT TO ANY SUBSTANTIAL RAINFALL, THE CONTRACTOR SHALL INSPECT ALL STRAW BALE SEDIMENT TRAPS (DIKES) FOR DAMAGE.
4. ANY ROTTED OR BROKEN BALES SHALL BE REPLACED IMMEDIATELY UPON INSPECTION.
5. SUBSTITUTION OF STEEL BARS FOR WOODEN STAKES IS NOT RECOMMENDED DUE TO POTENTIAL FOR DAMAGING CONSTRUCTION EQUIPMENT.
6. IF USED IN A CHANNEL OR SWALE, STRAW BALES MUST LINE ENTIRE WIDTH OF CHANNEL.



10 NTS **STRAW BALE SEDIMENT TRAP**

NO.	DESCRIPTION	DATE
1	PLAN REVIEW 4.6.12	4-6-12

REVISIONS

ARROWHEAD ENGINEERING, INC.
1685 S. SAN TODARO PLACE
TUCSON, ARIZONA 85713
PHONE: 520-822-7702
FAX: 520-777-3438

Registered Professional Engineer (Civil) CERTIFICATE No. 43855 MERWIN T. YELLOWHAIR Date Signed 1-26-12 ARIZONA, U.S.A. EXPIRES 3/31/12

GRADING AND DRAINAGE DETAILS
NATIVE NEW VOC. HIGH SCHOOL
HOGANS
THE PROJECT IS LOCATED IN A PORTION SECTION 12, T-38-N, R-19-E, G&S.R.B.&M. NAVAJO COUNTY, ARIZONA

AEI JOB: 211-013 SCALE: 1" = 10'

SHEET 6 OF 6

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\\192.168.1.16\guest-share\NATIVE HOGANS\ENGINEERING\NATIVE HOGAN BASE.dwg Plotted: Apr 06, 2012