AGENDA

TUSAYAN TOWN COUNCIL WORKSHOP

PURSUANT TO A.R.S. § 38-431.02 & §38-431.03

Wednesday, December 3, 2014 at 5:00pm

TUSAYAN TOWN HALL BUILDING

845 Mustang Drive, Tusayan Arizona

Pursuant to A.R.S. § 38-431.02, notice is hereby given to the members of the Tusayan Town Council and to the general public that the Tusayan Town Council will hold a Meeting and Municipal Code workshop open to the public on Wednesday, December 3, 2014 at the Tusayan Town Hall Building. If authorized by a majority vote of the Tusayan Town Council, an executive session may be held immediately after the vote and will not be open to the public. The Council may vote to go into executive session pursuant to A.R.S. § 38-431.03.A.3 for legal advice concerning any matter on the agenda, including those items set forth in the consent and regular agenda sections. The Town Council may change, in its discussion, the order in which any agenda items are discussed during the course of the meeting.

Persons with a disability may request a reasonable accommodation by contacting the Town Manager at (928) 638-9909 as soon as possible.

As a reminder, if you are carrying a cell phone, electronic pager, computer, two-way radio, or other sound device, we ask that you silence it at this time to minimize disruption of today's meeting.

TOWN COUNCIL MUNICIPAL CODE WORKSHOP

1. **CALL TO ORDER AND PLEDGE OF ALLEGIANCE**
2. **ROLL CALL**

MAYOR GREG BRYAN
VICE MAYOR AL MONTOYA
COUNCILMEMBER BILL FITZGERALD
COUNCILMEMBER JOHN RUETER
COUNCILMEMBER CRAIG SANDERSON

** One or two Councilmembers may attend by telephone*

3. **DISCUSSION OF SEWER SYSTEM REPORT FOR THE SCHOOL/PARK SEWER EXTENSION AND CDBG IMPROVEMENTS FROM WOODSON ENGINEERING**
4. **MOTION TO ADJOURN**

CERTIFICATION OF POSTING OF NOTICE

The undersigned hereby certifies that a copy of the foregoing notice was duly posted at the General Store in Tusayan, Arizona on this _____ day of November, 2014, at _____ pm in accordance with the statement filed by the Tusayan Town Council

_____
Signature of person posting the agenda

TOWN OF TUSAYAN
COMMUNITY PARK
OPINION OF PROBABLE COST

Project Name:
TUSAYAN COMMUNITY PARK

Project No.:
114682

DATE:
11/18/2014

Prepared By:
Woodson Engineering & Surveying, Inc.

Woodson Engineering Survey Inc.
124 N. Elden St.
Flagstaff, AZ 86001

Opinion of Probable Cost

TUSAYAN COMMUNITY PARK
114682

Item No.	Item Description	Unit	Quantity	Price	Amount
1	MAINTENANCE AND PROTECTION OF TRAFFIC	L.SUM	1	$1,500.00	$1,500.00
2	MISCELLANEOUS GRADING	L.SUM	1	$3,000.00	$3,000.00
3	REMOVE EXISTING LOG CURBING	L.SUM	1	$500.00	$500.00
4	AGGREGATE BASE, CLASS 2	CU.YD.	72	$40.00	$2,880.00
5	PORTLAND CEMENT CONCRETE PAVEMENT (6")	SQ.YD.	150	$50.00	$7,500.00
6	CONCRETE SINGLE CURB (MAG 222)	L.FT.	147	$12.00	$1,764.00
7	CONCRETE SIDEWALK MAG SD 230	SQ.FT.	2,540	$13.00	$33,020.00
8	48" SEWER MANHOLE MAG SD 420	EACH	3	$4,000.00	$12,000.00
9	8" PVC SEWER PIPE	L.FT.	600	$85.00	$51,000.00
10	4" PVC SEWER SERVICE PIPE	L.FT.	40	$20.00	$800.00
11	8" VALVE W/10" TAPPING SLEEVE	EACH	1	$4,500.00	$4,500.00
12	8" PVC RECLAIMED WATER PIPE	L.FT.	210	$85.00	$17,850.00
13	1 1/2" RECLAIMED WATER LINE	L.FT.	40	$22.00	$880.00
14	1 1/2" RECLAIMED TAP AND METER	EACH	1	$1,300.00	$1,300.00
15	1 1/2" ANNEALED COPPER WATER LINE	L.FT.	525	$25.00	$13,125.00
16	1 1/2" TAP AND METER	EACH	1	$1,300.00	$1,300.00
17	FIRE HYDRANT (SPECIAL) (MAG 360-1)	EACH	1	$3,750.00	$3,750.00
18	REMOVE AND REINSTALL SIGN	EACH	2	$75.00	$150.00
19	REMOVE AND REINSTALL PED LIGHT FIXTURE	EACH	1	$100.00	$100.00
20	DUAL COMPONENT PAVEMENT MARKING	L.SUM	1	$500.00	$500.00
21	MISCELLANEOUS WORK (COORDINATE WITH CXT PRECAST)	L.SUM	1	$1,500.00	$1,500.00
				Subtotal	**$157,419.00**
22	EROSION CONTROL (1%)	L.SUM	1	$1,574.19	$1,574.19
23	FURNISH WATER SUPPLY (0.5%)	L.SUM	1	$787.10	$787.10
24	CONSTRUCTION SURVEYING AND LAYOUT (2%)	L.SUM	1	$3,148.38	$3,148.38
				Subtotal	**$3,935.48**
25	MOBILIZATION (5%)	L.SUM	1	$7,870.95	$7,870.95
				Subtotal for Mobilization	**$7,870.95**
	CONSTRUCTION CONTINGENCIES (5%)	L.SUM	1	$7,870.95	$7,870.95
	CONSTRUCTION ADMINISTRATION (5%)	L.SUM	1	$7,870.95	$7,870.95

THIS ESTIMATE IS BASED ON THE PLANS FOR THE PROJECT DATED 11/18/2014. THIS OPINION OF PROBABLE COST IS MADE ON THE BASIS OF OUR EXPERIENCE AND QUALIFICATIONS AND REPRESENTS OUR BEST JUDGEMENT. HOWEVER, SINCE SO MANY ASPECTS OF COSTS ARE BEYOND OUR CONTROL, WE CANNOT AND DO NOT GUARANTEE THAT COSTS WILL NOT VARY FROM THIS OPC.

Total Project Cost **$184,967.33**

ALTERNATE BID

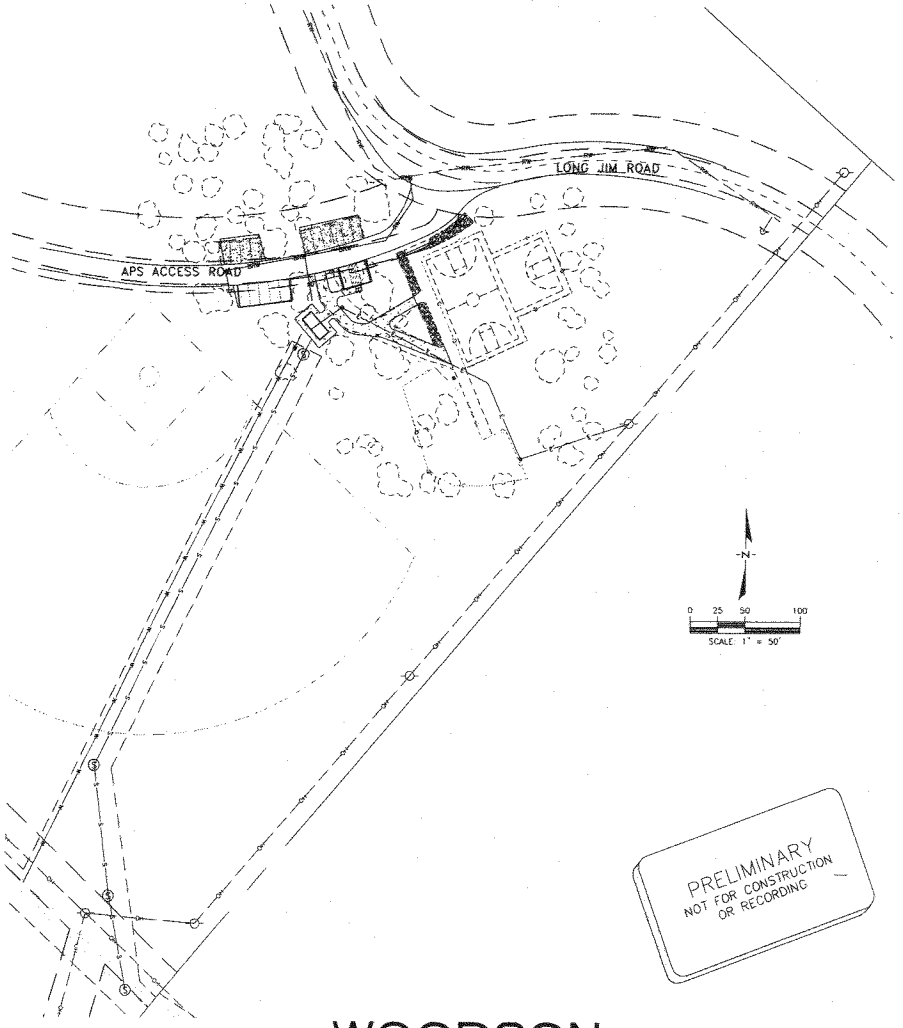
4	AGGREGATE BASE, CLASS 2	CU.YD.	32	$40.00	$1,280.00
5	PORTLAND CEMENT CONCRETE PAVEMENT (6")	SQ.YD.	190	$50.00	$9,500.00
6	CONCRETE SINGLE CURB (MAG 222)	L.FT.	166	$12.00	$1,992.00
				Alternate Bid Subtotal	**$12,772.00**

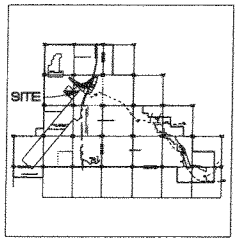
CONSTRUCTION PLANS
TUSAYAN COMMUNITY PARK

PORTION OF SECTIONS 23 & 24, TOWNSHIP 30 NORTH, RANGE 2 EAST,
GILA AND SALT RIVER MERIDIAN,
TOWN OF TUSAYAN, COCONINO COUNTY, ARIZONA

LEGEND

- STRUCTURE, EXISTING
- CONCRETE, EXISTING
- CONCRETE, PROPOSED
- ASPHALT, EXISTING
- ASPHALT, PROPOSED
- GRAVEL, EXISTING
- CURB, PROPOSED
- ROAD CENTERLINE, EXISTING
- RIGHT OF WAY, EXISTING
- LOT LINE, EXISTING
- BUILDING EDGE, EXISTING
- MAJOR CONTOUR, EXISTING
- MINOR CONTOUR, EXISTING
- OVERHEAD ELECTRIC LINE, EXISTING
- GAS LINE, EXISTING
- WATER LINE, EXISTING
- SANITARY-SEWER LINE, EXISTING
- CHAIN LINK FENCE, EXISTING
- BARBED WIRE FENCE, EXISTING
- WOOD FENCE, EXISTING
- FLOW, PROPOSED
- GAS METER, EXISTING
- GAS VALVE, EXISTING
- WATER METER, EXISTING
- WATER VALVE, EXISTING
- FIRE HYDRANT, EXISTING
- SANITARY-SEWER MANHOLE, EXISTING
- MAIL BOX, EXISTING
- MAIL BOX, NEW
- LIGHT POLE, EXISTING
- GUY ANCHOR, EXISTING
- UTILITY POLE, EXISTING
- SIGN POST, EXISTING
- BOLLARD, EXISTING
- SET 1/2" REBAR WITH "CONTROL POINT" CAP





VICINITY MAP
TUSAYAN, ARIZONA (NOT TO SCALE)

SHEET INDEX

1 COVER SHEET
2 NOTES & QUANTITIES SHEET
3 DETAIL SHEET
4 PLAN SHEET
5 SEWER & WATER SHEET
6 CONTROL SHEET

SURVEY NOTES

NO FIELD MEASUREMENTS WERE MADE TO PREPARE THIS MAP. EXISTING IMPROVEMENTS AND TOPOGRAPHY SHOWN WERE TAKEN FROM AERIAL PHOTOGRAPHS.

BASIS OF ELEVATIONS: ELEVATIONS AND CONTOURS SHOWN ARE DERIVED FROM USGS QUAD MAPS AND ARE ILLUSTRATIVE ONLY AND NOT MEANT TO CONVEY ACTUAL FIELD CONDITIONS. CONTRACTOR SHALL VERIFY AND ADHERE TO THE RELATIONSHIP OF PROPOSED TO "EXISITNG" ELEVATIONS.

AVERAGE ELEVATION: 6840.00 FEET (NAVD88)

NO EXCAVATIONS OR OTHER DIRECT DETERMINATIONS OF UNDERGROUND UTILITY LOCATIONS WERE MADE. INFORMATION CONCERNING UNDERGROUND UTILITIES SHOULD BE REGARDED AS APPROXIMATE ONLY.

FLOOD ZONE

THIS SURVEY LIES ENTIRELY WITHIN FLOOD ZONE "X" PER FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER 04005C3825G, DATED SEPTEMBER 3, 2010. PANEL 3825 OF 8475, COCONINO COUNTY, ARIZONA AND INCORPORATED AREAS, BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. FLOOD ZONE "X" IS DESIGNATED AS AREAS OF LESS THAN 0.2% ANNUAL CHANCE FLOOD. NO BASE FLOOD ELEVATIONS ARE DETERMINED.

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

UTILITY ACKNOWLEDGMENT

ARIZONA PUBLIC SERVICE DATE

TOWN APPROVAL

TOWN OF TUSAYAN DATE

CONCEPT APPROVAL
THE TOWN OF TUSAYAN APPROVES THESE PLANS FOR CONCEPT ONLY. ALL LIABILITY FOR ERRORS OR OMISSIONS IS THE RESPONSIBILITY OF THE DESIGN ENGINEER.

AUTHORIZATION TO CONSTRUCT
THE SIGNATURES ABOVE ARE REQUIRED BEFORE THE CONTRACTOR CAN COMMENCE. UNSIGNED, THESE PLANS HAVE NOT BEEN COMPLETED WITH RESPECT TO AGENCY REVIEW AND APPROVAL.

OWNER
TOWN OF TUSAYAN
845 MUSTANG DR.
TUSAYAN, AZ 86023
(928) 638-9909

ENGINEER
WOODSON ENGINEERING AND SURVEYING, INC.
124 N. ELDEN ST.
FLAGSTAFF, AZ 86001
(928) 774-4636

WOODSON
ENGINEERING AND SURVEYING, INC.
124 N. ELDEN ST.
FLAGSTAFF, AZ 86001
PHONE: (928) 774-4636 FAX: (928) 774-4646

11/18/2014

WOODSON ENGINEERING AND SURVEYING, INC.
124 N. ELDEN ST. • FLAGSTAFF, AZ 86001 • PHONE: (928) 774-4636 FAX: (928) 774-4646

114682

TUSAYAN COMMUNITY PARK
TOWN OF TUSAYAN
CONSTRUCTION PLANS

DRAFTED BY: BRW
DATE: 11/18/14
PROJ. NO.: 114682
FN: COVER

WATER AND SEWER NOTE

1. ROUGH GRADING SHALL BE COMPLETED WITHIN ONE TENTH OF A FOOT OF PLAN GRADE PRIOR TO INSTALLATION OF UNDERGROUND UTILITIES.

2. NO TRENCH SHALL BE FILLED WITH BEDDING MATERIAL OR BACKFILL UNTIL THE EXCAVATION AND PIPE LAYING, RESPECTIVELY, HAVE BEEN APPROVED BY THE CITY'S AUTHORIZED REPRESENTATIVE.

3. A WATER PRESSURE TEST IS REQUIRED OF ALL WATER LINES AND A HYDROSTATIC OR AIR TEST IS REQUIRED OF ALL SEWER LINES. TESTS ARE TO BE CONDUCTED AFTER BACKFILLING IS COMPLETE AND COMPACTED. THE WATER LINE SHALL BE LEAKAGE AND PRESSURE TESTED PER AWWA C-600 STANDARDS.

4. WATER AND SEWER SERVICE LINES ARE TO BE MARKED AS SHOWN ON THE STANDARD SERVICE DETAILS. NO SEWER SERVICE LINES ARE PERMITTED IN A MANHOLE.

5. WATER LINE DISINFECTION IS TO BE ACCOMPLISHED AS OUTLINED IN ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) BULLETIN NO. 8.

6. WATER PIPE CLASSIFICATION SHALL BE CLASS 200 C-900 PVC AND SHALL CONFORM TO CAST-IRON OUTSIDE DIAMETER AND HAVE ELASTOMERIC GASKETS AND COUPLINGS. ALL DUCTILE IRON PIPE LINES SHALL BE POLYETHYLENE ENCASED IN ACCORDANCE WITH MAG SPECIFICATIONS. ALL COMPONENTS OF THE WATER SYSTEM SHALL BE "LEAD-FREE".

7. PROVIDE BACKFLOW PREVENTION AS CLOSE AS POSSIBLE TO THE SERVICE CONNECTION.

8. ALL PUBLIC SANITARY SEWER LINES WILL BE INSPECTED PRIOR TO ACCEPTANCE BY THE TOWN.

9. IN ORDER TO PROTECT PUBLIC WATER SYSTEMS FROM POSSIBLE CONTAMINATION, A WATER MAIN SHALL NOT:

A. INFRINGE UPON AN AREA WHICH IS WITHIN SIX FEET OF EITHER SIDE OF A SEWER MAIN AND SHALL NOT BE BELOW, AT THE SAME LEVEL AS, OR LESS THAN TWO FEET ABOVE THE TOP OF THE SEWER MAIN, UNLESS EXTRA PROTECTION IS PROVIDED. EXTRA PROTECTION SHALL CONSIST OF CONSTRUCTING THE SEWER MAIN WITH MECHANICAL JOINT DUCTILE IRON PIPE OR WITH SLIP JOINT DUCTILE IRON PIPE IF JOINT RESTRAINT IS PROVIDED OR SHALL CONSIST OF ENCASING BOTH THE WATER AND SEWER MAINS IN AT LEAST SIX INCHES OF CONCRETE. EXTRA PROTECTION SHALL CONSIST OF ENCASING BOTH WATER AND SEWER IN SIX INCHES OF CONCRETE FOR AT LEAST TEN FEET BEYOND THE AREA COVERED IN THIS SUBPARAGRAPH.

B. UNDER ANY CIRCUMSTANCES, INFRINGE UPON AN AREA WHICH IS WITHIN TWO FEET OF EITHER SIDE OF OR TWO FEET BELOW THE SEWER MAIN.

NO WATER PIPE SHALL PASS THROUGH, OR COME INTO CONTACT WITH ANY PART OF A SEWER MANHOLE, THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND MANHOLES SHALL BE SIX FEET, MEASURED FROM THE CENTER OF THE MANHOLE.

THE MINIMUM SEPARATION BETWEEN FORCE MAINS OR PRESSURE SEWERS AND WATER MAINS SHALL BE TWO FEET VERTICALLY AND SIX FEET HORIZONTALLY UNDER ALL CONDITIONS. WHERE A SEWER FORCE MAIN CROSSES ABOVE A WATER LINE, OR LESS THAN SIX FEET BELOW IT, THE SEWER MAIN SHALL BE ENCASED IN AT LEAST SIX INCHES OF CONCRETE FOR TEN FEET ON EITHER SIDE OF THE WATER MAIN.

ALL DISTANCES ARE MEASURED PERPENDICULARLY FROM THE OUTSIDE OF THE SEWER MAIN TO THE OUTSIDE OF THE WATER MAIN. THESE SEPARATION REQUIREMENTS DO NOT APPLY TO BUILDING PLUMBING OR INDIVIDUAL HOUSE SERVICE CONNECTIONS.

10. SEWER LINES AND MANHOLES SHALL BE TESTED FOR INFILTRATION PER ADEQ BULLETIN NO. 11; ASTM F 1417-92 AND ASTM C 1244-93. 100% OF THE SEWER LINES AND MANHOLES SHALL BE TESTED.

11. THE TOTAL LENGTH OF THE SEWER LINE IS TO BE TESTED FOR UNIFORM SLOPE BY LAMP LIGHTING, REMOTE CAMERA OR SIMILAR METHOD APPROVED BY THE DEPARTMENT.

12. NO WATER SETTLING OF TRENCH FILL MATERIAL IS ALLOWED.

13. ALL WATER AND SEWER DESIGN AND CONSTRUCTION SHALL CONFORM TO THE CURRENT ADEQ REQUIREMENTS. WHEN ADEQ REQUIREMENTS ARE IN CONFLICT WITH THESE STANDARDS, THE MORE RESTRICTIVE SHALL APPLY.

14. TRACER WIRES AND TAPES SHALL BE INSTALLED PRIOR TO TESTING THE WATER AND SEWER MAIN.

PAVING NOTES

1. EXACT POINT OF MATCHING TERMINATION AND OVERLAY, IF NECESSARY, SHALL BE DETERMINED IN THE FIELD BY THE TOWN'S REPRESENTATIVE.

2. NO JOB WILL BE CONSIDERED COMPLETE UNTIL: A) ALL CURBS, PAVEMENTS, SIDEWALKS, AND MANHOLES HAVE BEEN CLEANED OF ALL DIRT AND DEBRIS; B) SURVEY MONUMENTS ARE INSTALLED AND STAMPED; C) ALL FRAMES, COVERS, AND VALVE BOXES ARE ADJUSTED TO GRADE.

3. NO PAVING CONSTRUCTION SHALL BE STARTED UNTIL ALL UTILITY LINES ARE COMPLETED AND APPROVED UNDER PROPOSED PAVED AREAS.

4. BASE COURSE WILL NOT BE PLACED UNTIL SUBGRADE HAS BEEN APPROVED BY THE TOWN'S REPRESENTATIVE.

5. THE LOCATION OF ALL WATER VALVES, FIRE HYDRANTS, AND MANHOLES MUST AT ALL TIMES DURING CONSTRUCTION BE REFERENCED AND MADE ACCESSIBLE TO THE CITY.

6. UTILITY FACILITIES IN CONFLICT WITH THIS WORK WILL BE RELOCATED BY THE PERMITTEE OR THE UTILITY OWNER. THIS ACTIVITY SHALL BE COORDINATED WITH THE OWNER OF THE UTILITY TO PREVENT ANY UNNECESSARY INTERRUPTION OF SERVICE TO EXISTING CUSTOMERS.

7. EXISTING STREET AND TRAFFIC SIGNS WILL BE MAINTAINED DURING CONSTRUCTION AND RELOCATED BY THE PERMITTEE AS DIRECTED BY THE CITY REPRESENTATIVE.

RIGHT-OF-WAY AND TRAFFIC CONTROL

THE CONTRACTOR SHALL PROVIDE ANY NECESSARY TRAFFIC CONTROL DEVICES REQUIRED FOR THE CONTROL OF VEHICLE AND PEDESTRIAN TRAFFIC AFFECTED BY THE CONSTRUCTION. ALL TRAFFIC CONTROL PLANS MUST BE APPROVED BY THE OWNER OR HIS REPRESENTATIVE PRIOR TO IMPLEMENTATION.

UTILITIES

UNDERGROUND UTILITY LOCATIONS AND VALVE COVERS SHOWN ON THESE PLANS WERE DETERMINED FROM FIELD MEASUREMENTS, CONSTRUCTION PLANS, RECORD PLANS, OR UTILITY MAPS FURNISHED BY OTHERS. LOCATIONS OF UNDERGROUND AND SURFACE APPURTENANCES TO THE UTILITIES ARE TO BE REGARDED AS APPROXIMATE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ESTABLISH IN THE FIELD THE ACTUAL LOCATIONS AND NUMBER OF ALL UNDERGROUND LINES AND SURFACE APPURTENANCES WHICH MAY IN ANY WAY AFFECT THE WORK.

IT IS NOT WITHIN THE SCOPE OF THE PLANS FOR THE ENGINEER TO LOCATE, IDENTIFY OR FORESEE EVERY UTILITY CONFLICT WHICH MAY ARISE DURING THE CONSTRUCTION PHASE OF THE PROJECT. BUT IT IS THE INTENT OF THE OWNER TO REASONABLY COMPENSATE THE CONTRACTOR FOR WORK REQUIRED TO RELOCATE OR ADJUST UTILITIES CONFLICTING WITH THE CONSTRUCTION OF THE PROJECT. TO THAT END, UTILITIES (AS DEFINED IN MAG SS 101.2) WHICH ARE ENCOUNTERED WILL BE ADDRESSED AS FOLLOWS:

1) UTILITY RELOCATIONS OR ADJUSTMENTS NOTED ON THE PLANS SHALL BE PAID FOR ON A LUMP SUM BASIS.

2) UTILITY RELOCATIONS OR ADJUSTMENTS NOT READILY VISIBLE FROM THE SURFACE PRIOR TO CONSTRUCTION OR KNOWN FROM PREVIOUS PLANS SHALL BE ADDRESSED ON A CASE BY CASE BASIS. THE TOWN SHALL DETERMINE WHAT WORK IS REQUIRED TO PRODUCE THE DESIRED FINAL PRODUCT. IF A UNIT BID PRICE DOES NOT EXIST THEN COMPENSATION MUTUALLY ACCEPTABLE TO THE OWNER AND CONTRACTOR SHALL BE MADE.

IN EITHER SITUATION, WORK ON THE SPECIFIC CASE SHALL NOT PROCEED UNTIL THE AMOUNT OF COMPENSATION IS AGREED UPON.

COMPENSATION FOR UTILITY RELOCATIONS AND ADJUSTMENTS SHALL NOT INCLUDE COSTS FOR REPAIR TO THE UTILITY DAMAGED BY THE CONTRACTOR OR HIS SUBCONTRACTOR(S). THE CONTRACTOR IS NOT RELIEVED OF THE RESPONSIBILITY FOR DETERMINING THE LOCATION OF ALL UTILITIES AFFECTING THE WORK.

THE APPROPRIATE UTILITY COMPANIES SHALL BE NOTIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. THE "BLUE STAKE" NUMBER IS 1-800-STAKEIT. CONTRACTOR SHALL ALLOW TWO WORKING DAYS AFTER "BLUE STAKE" IS NOTIFIED, BEFORE COMMENCING ANY EXCAVATION WORK IN THE PROXIMITY OF BURIED UTILITIES.

AT LEAST 48 HOURS PRIOR NOTICE IS REQUIRED BEFORE DISRUPTING EXISTING UTILITY SERVICE TO MAKE CONNECTIONS OR DISCONNECTIONS. THE NOTICE MUST INCLUDE THE EXACT TIME OF THE DISRUPTION OF SERVICE AND THE EXPECTED DURATION OF THE LOSS OF SERVICE. CERTAIN UTILITIES ARE TO REMAIN IN SERVICE DURING THE CONSTRUCTION OF THE FILL AND UPON COMPLETION OF THIS CONTRACT. THESE UTILITIES SHALL BE PROTECTED DURING THE CONSTRUCTION AND CUT OR FILL PLACEMENT SHALL NOT PROHIBIT MAINTENANCE ACCESS TO THESE UTILITIES.

DRAINAGE MAINTENANCE DURING CONSTRUCTION

ADEQUATE DRAINAGE OF THE CONSTRUCTION AREA SHALL BE PROVIDED AT ALL TIMES. CONSTRUCTION DRAINS SHALL BE PROVIDED AS NEEDED TO ENABLE WATER TO DRAIN FROM THE CONSTRUCTION AREA RAPIDLY AND WITHOUT DAMAGING THE WORK IN PROGRESS. TO FURTHER PROMOTE GOOD DRAINAGE OF THE SITE, DRAINAGE CHANNELS, CULVERTS, AND STRUCTURES SHALL BE CONSTRUCTED FROM DOWNSTREAM TO UPSTREAM IN SUCH A WAY THAT, DURING CONSTRUCTION, THEY DO NOT IMPEDE THE FLOW OF WATER FROM THE CONSTRUCTION AREA. DAMAGE TO ADJACENT PROPERTIES OR TO ANY PORTION OF THE WORK CAUSED BY THE CONTRACTOR'S FAILURE TO PROVIDE ADEQUATE DRAINAGE OF THE CONSTRUCTION AREA OR TO ORDER THE WORK SO AS TO MINIMIZE THE POSSIBLE EXTENT OF SUCH DAMAGE, SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. NO EXTENSION OF TIME SHALL BE GRANTED ON ACCOUNT OF THE TIME REQUIRED TO MAKE SUCH REPAIRS.

FILL CONSTRUCTION

SITE PREPARATION, EXCAVATION, AND PLACEMENT SHALL BE IN ACCORDANCE WITH MAG SS 205 AND 206. THE BID SCHEDULE ITEM FOR FILL CONSTRUCTION IS INTENDED TO INCLUDE FULL PAYMENT FOR ALL MATERIAL REQUIRED TO BUILD THE PROJECT AND THE DISPOSAL OF ANY EXCESS MATERIAL FROM THE SITE.

MISCELLANEOUS REMOVALS AND OTHER WORK

REMOVALS NECESSITATED BY THE WORK AS IT PROGRESSES AND NOT SPECIFICALLY CALLED OUT ON THE PLANS WILL BE CONSIDERED INCIDENTAL WORK.

WATER SUPPLY

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND PROVIDE ALL NECESSARY WATER FOR HIS CONSTRUCTION OPERATION AT HIS OWN EXPENSE. CONSTRUCTION WATER MAY BE PURCHASED FROM THE TOWN OF TUSAYAN UTILITY DEPARTMENT.

CLEANUP AND DUST CONTROL

THROUGHOUT ALL PHASES OF THE CONSTRUCTION THE CONTRACTOR SHALL KEEP THE WORK AREA, ADJACENT PROPERTIES, AND STREETS CLEAN AND FREE FROM RUBBISH, EXCESS MATERIALS, DUST, AND DEBRIS GENERATED BY THE CONSTRUCTION ACTIVITY.

PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE: (MAG SS 107.9)

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL PUBLIC AND PRIVATE PROPERTY AND SHALL PROTECT CAREFULLY FROM DISTURBANCE OR DAMAGE, ALL LAND MONUMENTS AND PROPERTY MARKS UNTIL THE ENGINEER HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION AND SHALL NOT MOVE THEM UNTIL DIRECTED.

PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL RETAIN A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF ARIZONA TO REFERENCE ALL SURVEY MONUMENTS. AFTER THE CONSTRUCTION IS COMPLETED, THE SAME LAND SURVEYOR SHALL RE-MONUMENT ANY DAMAGED OR MISSING SURVEY MONUMENTS PER THE "ARIZONA BOUNDARY SURVEY MINIMUM STANDARDS" AND ANY ADOT OR MAG SPECIFICATIONS CALLED FOR ON THE PLANS.

GENERAL STRIPING NOTES

ALL PAVEMENT STRIPING SHALL CONFORM TO THE APPLICABLE ADOT SPECIFICATIONS FOR PAINT.

JOBSITE SAFETY

NEITHER THE PROFESSIONAL ACTIVITIES OF THE DESIGN PROFESSIONAL, NOR THE PRESENCE OF THE DESIGN PROFESSIONAL OR HIS OR HER EMPLOYEES AND SUB CONSULTANTS AT A CONSTRUCTION SITE, SHALL RELIEVE THE GENERAL CONTRACTOR AND ANY OTHER ENTITY OF THEIR OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING OR COORDINATING ALL PORTIONS OF THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. THE DESIGN PROFESSIONAL AND HIS OR HER PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR OTHER ENTITY OR THEIR EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PRECAUTIONS. THE CLIENT AGREES THAT THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOBSITE SAFETY, AND WARRANTS THAT THIS INTENT SHALL BE MADE EVIDENT IN THE CLIENT'S AGREEMENT WITH THE GENERAL CONTRACTOR. THE CLIENT ALSO AGREES THAT THE CLIENT, THE DESIGN PROFESSIONAL AND THE DESIGN PROFESSIONAL'S CONSULTANTS SHALL BE INDEMNIFIED AND SHALL BE MADE ADDITIONAL INSUREDS UNDER THE GENERAL CONTRACTOR'S GENERAL LIABILITY INSURANCE POLICY.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

THE STATE LAW, ARS SECTION 49-104.B.10, REQUIRES THAT CONSTRUCTION OF THE PROJECT MUST BE IN ACCORDANCE WITH RULES AND REGULATIONS OF THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY.

ALL PVC WATERLINES AND FITTING SHALL HAVE NSF-PW SEAL.
ALL MATERIALS AND PRODUCTS USED IN DRINKING WATER SYSTEMS SHALL CONFORM TO NSF STANDARD 61.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) NOTE

THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REGULATES STORM WATER DISCHARGES FROM CONSTRUCTION SITES UNDER THE NATIONAL STORM WATER PROGRAM. THE PROJECT OWNER AND THE CONSTRUCTION CONTRACTOR SHARE RESPONSIBILITY AND LIABILITY UNDER THIS PROGRAM. ACTIVITIES COVERED UNDER THIS PROGRAM INCLUDE CLEARING, GRADING, AND EXCAVATION. PROJECTS THAT ARE INCLUDED HAVE DISTURBED AREAS WITH MORE THAN 1 ACRES. UNDER NPDES THE CONTRACTOR MUST PREVENT POLLUTANTS FROM THE SITE FROM ENTERING WATERS OF THE US.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTROL EROSION AND RUNOFF FROM A CONSTRUCTION SITE. TO COMPLY WITH REGULATIONS, THE CONTRACTOR MUST FILE A NOTICE OF INTENT TO DISCHARGE (NOI) 2 DAYS BEFORE CONSTRUCTION BEGINS. A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MUST BE DEVELOPED BY BOTH THE OWNER AND THE CONTRACTOR AS PART OF COMPLIANCE WITH THESE REGULATIONS. THE OWNER AND THE CONTRACTOR MUST ALSO IMPLEMENT THE SWPPP. DURING CONSTRUCTION, BOTH THE OWNER AND THE CONTRACTOR MUST CERTIFY THAT ALL WORK PERFORMED IS PER NPDES REGULATIONS. AFTER CONSTRUCTION IS COMPLETE, THE OWNER AND THE CONTRACTOR MUST FILE A NOTICE OF TERMINATION. ALL WORK DESCRIBED ABOVE MUST BE PERFORMED IN ACCORDANCE WITH NPDES AND THE NATIONAL STORM WATER PROGRAM REGULATIONS.

WOODSON ENGINEERING GENERAL NOTES

THE WORK SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT EDITION(S) OF THE FOLLOWING SPECIFICATIONS AND THESE PLANS: MAG UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, MAG UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, COCONINO COUNTY ENGINEERING DESIGN AND CONSTRUCTION STANDARDS, ADHS (ADEQ) ENGINEERING BULLETINS NO. 8 AND 10 (WATER SYSTEMS), ADHS (ADEQ) ENGINEERING BULLETINS NO. 11 AND 12 (SEWAGE WORKS), AWWA STANDARDS, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), ADOT STANDARD SPECIFICATIONS AND DRAWINGS, AND TOWN OF TUSAYAN REQUIREMENTS.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COPIES OF THE ABOVE STANDARDS, SPECIFICATIONS, AND DETAILS, AS WELL AS ALL OTHER STANDARDS AND SPECIFICATIONS WHICH MAY BE NECESSARY TO COMPLETELY AND ACCURATELY INTERPRET THESE PLANS.

ALL QUANTITIES SHOWN ARE APPROXIMATE AND ARE FURNISHED SOLELY FOR THE CONTRACTOR'S CONVENIENCE. THEY DO NOT NECESSARILY CORRESPOND TO BID SCHEDULE ITEMS. PAYMENT WILL BE BASED ON BID SCHEDULE ITEMS FOR THE ENTIRE JOB AS SHOWN OR INFERRED BY THESE PLANS. THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR INDEPENDENTLY ESTIMATING QUANTITIES PRIOR TO BIDDING.

THE LOCATION OF EXISTING FEATURES INDICATED ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR MAKING COMPLETE AND ACCURATE ON-SITE DETERMINATIONS OF THE LOCATIONS OF ALL UTILITIES, STRUCTURES AND FIELD CONDITIONS, WHICH MAY AFFECT THE PROGRESS OF THE WORK.

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHAT PERMITS WILL BE REQUIRED FOR THE WORK AND OBTAINING AT HIS OWN EXPENSE ALL PERMITS REQUIRED UNLESS STATED OTHERWISE IN THE CONTRACT.

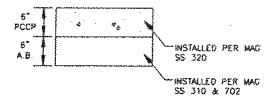
CERTIFICATION OF PRIVATE/NON-BUILDING STRUCTURES MAY BE REQUIRED BY THE TOWN OF TUSAYAN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY REQUIRED CERTIFICATIONS.

ALL ELEVATIONS SHOWN ON THE PLANS ARE FINISHED SURFACE ELEVATIONS (EXCEPT AS NOTED).

THE REGISTRANTS DUTY TO SEAL PROFESSIONAL DOCUMENTS DOES NOT EXTEND TO STANDARD DETAILS OR SPECIFICATIONS THAT HAVE BEEN OFFICIALLY ADOPTED AND PROVIDED BY THE AGENCY THAT HAS JURISDICTION OVER THIS PROJECT. THE STANDARD DETAILS AND SPECIFICATIONS SHOWN WITH THESE DOCUMENTS ARE INCLUDED TO PROVIDE CLEAR AND COMPLETE INFORMATION AND WERE NOT PREPARED BY THE REGISTRANT.

DESIGN WIND LOAD

ALL SIGNS, LIGHT POSTS, AND OTHER STREET RELATED STRUCTURES SHALL BE DESIGNED AND MANUFACTURED TO WITHSTAND A DESIGN WIND LOAD OF NINETY (90) MILES PER HOUR AND SHALL ALSO COMPLY WITH ALL OTHER LOCAL CODES, ORDINANCES AND REGULATIONS.



PAVEMENT STRUCTURAL SECTION NO. 1
NOT TO SCALE

APPROXIMATE QUANTITIES
PUBLIC IMPROVEMENTS
BASE BID

ITEM	QUANTITY
TRAFFIC CONTROL	1 L.S.
MISC. GRADING	1 L.S.
REMOVE EXISTING LOG CURBING	1 L.S.
AGGREGATE BASE, CLASS 2	72 C.Y.
PCCP STRUCTURAL SECTION NO. 1	150 S.Y.
SINGLE CURB, TYPE 'A' ON 6" AB (MAG SD 222)	147 L.F.
SIDEWALK ON 6" AB (MAG SD 230)	2,540 S.F.
48" SEWER MANHOLE MAG 420	3 EA.
8" PVC SEWER PIPE	600 L.F.
4" PVC SEWER SERVICE PIPE	40 L.F.
8" VALVE W/10" TAPPING SLEEVE	1 EA.
8" PVC RECLAIMED WATER LINE	210 L.F.
1 1/2" RECLAIMED WATER LINE	40 L.F.
1 1/2" RECLAIMED TAP & WATER METER	4 EA.
1 1/2" COPPER WATER LINE	525 L.F.
1 1/2" TAP & WATER METER	1 EA.
FIRE HYDRANT MAG 360-1	1 EA.
REMOVE AND REINSTALL SIGN	2 EA.
REMOVE AND REINSTALL PED LIGHT FIXTURE	1 EA.
TRAFFIC PAINT	1 L.S.
COORDINATION WITH CXT PRECAST FOR MOD. RR BUILDING	1 L.S.
SWPPP	1 L.S.

THE QUANTITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY ESTIMATING THE CONTRACT QUANTITIES. BY SUBMITTING HIS BID, THE CONTRACTOR REPRESENTS THAT THE TOTAL CONTRACT SUM IS ADEQUATE COMPENSATION FOR COMPLETING THE ENTIRE PROJECT AS SHOWN ON THE PLANS.

ALTERNATE BID

ITEM	QUANTITY
AGGREGATE BASE, CLASS 2	32 C.Y.
PCCP STRUCTURAL SECTION NO. 1	190 S.Y.
SINGLE CURB, TYPE 'A' ON 6" AB (MAG SD 222)	166 L.F.

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

TUSAYAN COMMUNITY PARK
TOWN OF TUSAYAN
CONSTRUCTION PLANS

11/18/2014

WOODSON ENGINEERING AND SURVEYING, INC.
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114682

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1-800-782-5348
(OUTSIDE MARICOPA COUNTY)

P/N: NOTES

REVISIONS:

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ENGINEERING AND SURVEYING, INC.
124 N. ELDEN ST.
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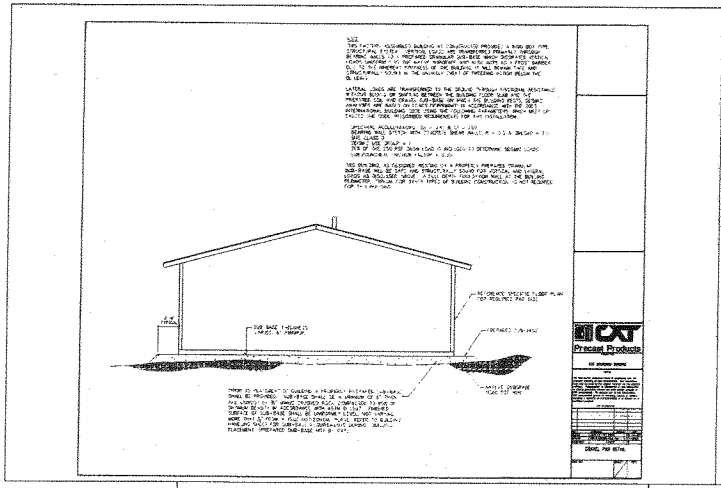
PHONE: (928) 774-4636 FAX: (928) 774-4846

TUSAYAN COMMUNITY PARK
CDBG IMPROVEMENTS

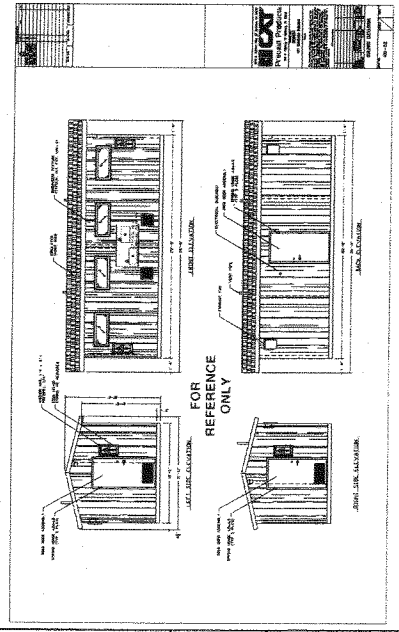
NOTES, DETAILS AND QUANTITIES

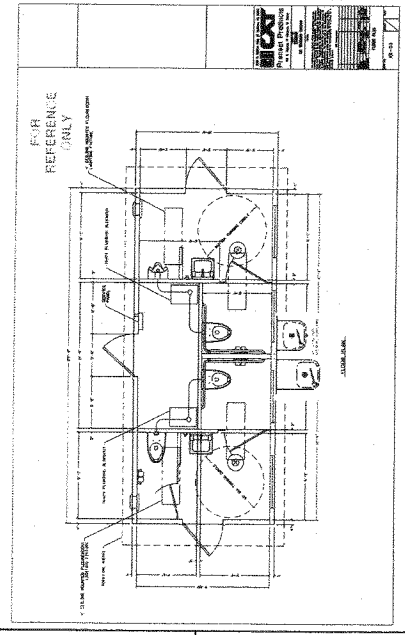
HOR SCALE:
VERT SCALE
DATE: 11/18/14
PROJECT NO.: 114682
AGENCY NO.:
SHEET NO.: 2 OF 5

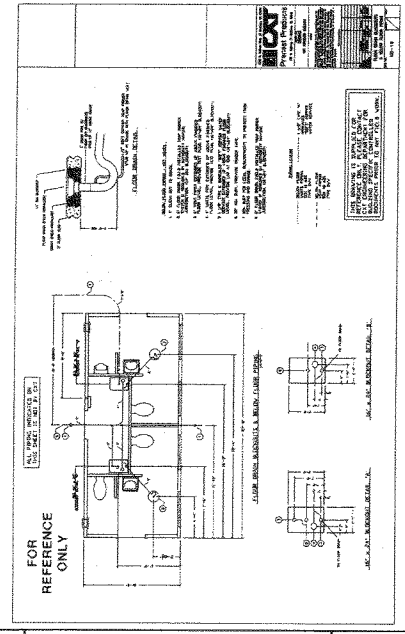
DESIGNED BY: RBM
DRAFTED BY: RBM
CHECKED BY: RAS



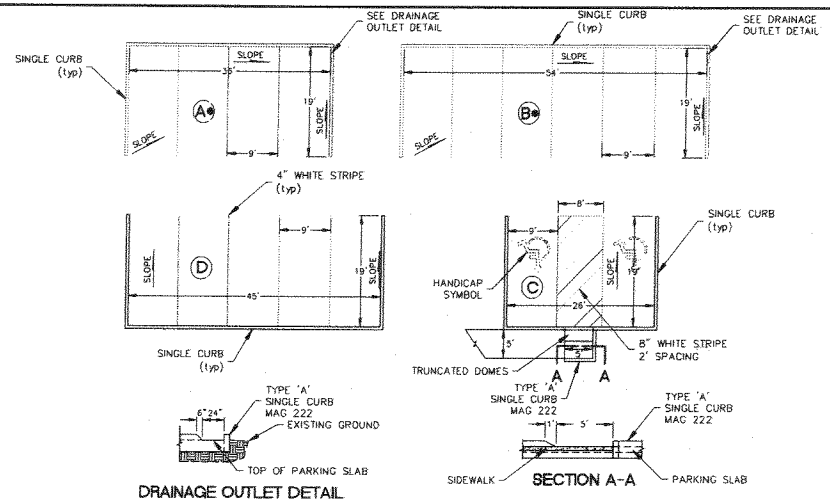
KODIAK BUILDING
BY CXT PRECAST







PRELIMINARY
NOT FOR CONSTRUCTION
OR RECORDING



DRAINAGE OUTLET DETAIL

SECTION A-A

* PARKING PADS A AND B ARE ALTERNATE BID ITEMS.

NOTES:
1. SLOPES SHALL NOT EXCEED 2.0% IN ANY DIRECTION PER ADA STANDARDS.

PARKING AREA DETAILS

WOODSON ENGINEERING AND SURVEYING, INC.
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11/18/2014

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TOWN OF TUSAYAN
CONSTRUCTION PLANS

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File: DETAIL

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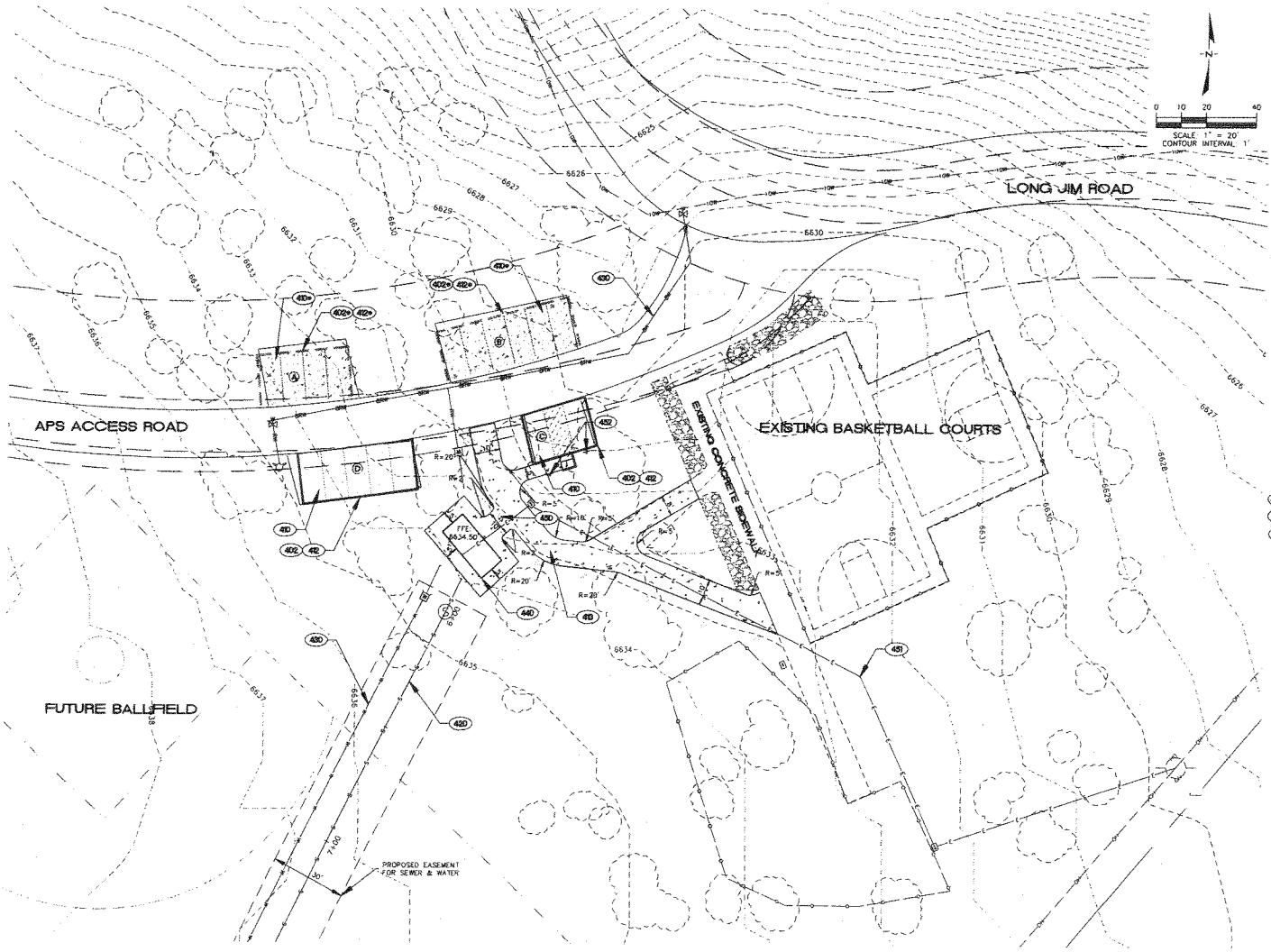
TUSAYAN COMMUNITY PARK
CDBG IMPROVEMENTS

DETAILS

HOR. SCALE:
VERT. SCALE:
DATE: 11/18/14
PROJECT NO.: 114682
AGENCY NO.:
SHEET NO.: 3 OF 6

DESIGNED BY: RHW
DRAFTED BY: RHW
CHECKED BY: MAS



CONSTRUCTION NOTES
PUBLIC IMPROVEMENTS

(400) (1 L.S.) EARTHWORK PER MAG SS 205, 210 & 211.

(402) (1 L.S.) REMOVE EXISTING LOG CURBING.

(410) (150 S.Y.) INSTALL 6" PCCP PER STRUCTURAL SECTION NO. 1 ON SHEET 2.

(412) (147 L.F.) INSTALL TYPE 'A' SINGLE CURB PER MAG SD 222 MODIFIED TO ADD 3" AB UNDER CURB.

(418) (2,540 S.F.) INSTALL 4" SIDEWALK PER MAG SD 230 MODIFIED TO ADD 6" AB UNDER SIDEWALK. MATCH EXISTING SLOPES AND GRADES WHERE POSSIBLE BUT DO NOT EXCEED 12:1 PER ADA STANDARDS.

(420) SEE SHEET 5 FOR SEWER LINE INSTALLATION.

(430) SEE SHEET 5 FOR WATER LINE INSTALLATION.

(440) (1 L.S.) CONTRACTOR SHALL COORDINATE WITH CXT PRECAST FOR SUB-BASE PREPARATION AND INSTALLATION OF PRECAST MODULAR RESTROOM BUILDING. FINISHED FLOOR ELEVATION = 6634.50'.

(450) (1 EA) REMOVE EXISTING PED LIGHT FIXTURE AND RE-INSTALL ON NEW SIDEWALK USING "WEDGE" TYPE ANCHORS. REMAINING PED LIGHT FIXTURES TO BE PROTECTED IN PLACE DURING CONSTRUCTION.

(451) (1 L.S.) INSTALL ELECTRICAL SERVICE TO PRECAST MODULAR RESTROOM BUILDING.

(452) (2 EA) REMOVE AND RE-INSTALL EXISTING HANDICAP SIGN AND U-CHANNEL POST. OFFSET 18" FROM BACK OF CURB OR EDGE OF SIDEWALK.

CONTRACTOR SHALL USE UTMOST CAUTION TO PROTECT THE NATURAL VEGETATION AND EXISTING TREES AND HYDRO-SEED ALL NATIVE AREAS DISTURBED DURING CONSTRUCTION. COST IS CONSIDERED INCIDENTAL AND INCLUDED IN BID ITEMS.

SEE SHEET 3 FOR PARKING LAYOUTS AND HANDICAP RAMP LAYOUT.

SEE SHEET 6 FOR CONTROL POINTS AND LAYOUT.

ALTERNATE BID
CONSTRUCTION NOTES
PUBLIC IMPROVEMENTS

(402a) (1 L.S.) REMOVE EXISTING LOG CURBING

(410a) (190 S.Y.) INSTALL 6" PCCP PER STRUCTURAL SECTION NO. 1 ON SHEET 2.

(412a) (186 L.F.) INSTALL TYPE 'A' SINGLE CURB PER MAG SD 222 MODIFIED TO ADD 3" AB UNDER CURB.

PARKING NOTES

BASED ON TOWN OF TUSAYAN ZONING ORDINANCE SECTION 25: OFF-STREET PARKING - THE FOLLOWING ASSUMPTIONS ARE MADE:

USING THE REQUIREMENTS FOR COMMUNITY CENTER (PARKS ARE NOT QUANTIFIED) OF 1 SPACE FOR EACH 4 PATRONS TO MAX CAPACITY RESULTS IN 18 BASKETBALL PLAYERS (6 FOR EACH HALF COURT), 16 DINERS (8 PER PICNIC TABLE) AND 24 IN THE TOT LOT THE TOTAL NUMBER OF PATRONS (58) CREATES A DEMAND OF 15 PARKING SPOTS.

PRE-CONSTRUCTION SPACES - 18
POST CONSTRUCTION SPACES - 17

ADA REQUIREMENTS ARE 1 HC SPACE PER 25. 2 ARE PROVIDED.

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

GENERAL NOTES

FIELD TOPOGRAPHY AND BOUNDARY SURVEY INFORMATION USED TO PREPARE THIS DRAWING IS FROM USGS QUAD MAP TUSAYAN WEST.

ALL ELEVATIONS SHOWN ON THE PLANS ARE FINISHED SURFACE ELEVATIONS (EXCEPT AS NOTED)

THE INFORMATION ON THESE CONSTRUCTION PLANS CONCERNING THE TYPE, SIZE, AND LOCATION OF UTILITIES HAS BEEN SHOWN BASED ON THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINATION OF EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. IT IS THE CONTRACTORS RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES, IN PLACE, UNLESS OTHERWISE NOTED OR SPECIFIED.

114682

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11/18/2014

TUSAYAN COMMUNITY PARK
CDBG IMPROVEMENTS
TOWN OF TUSAYAN
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(OUTSIDE MARICOPA COUNTY)

FN: PLAN

REVISIONS:

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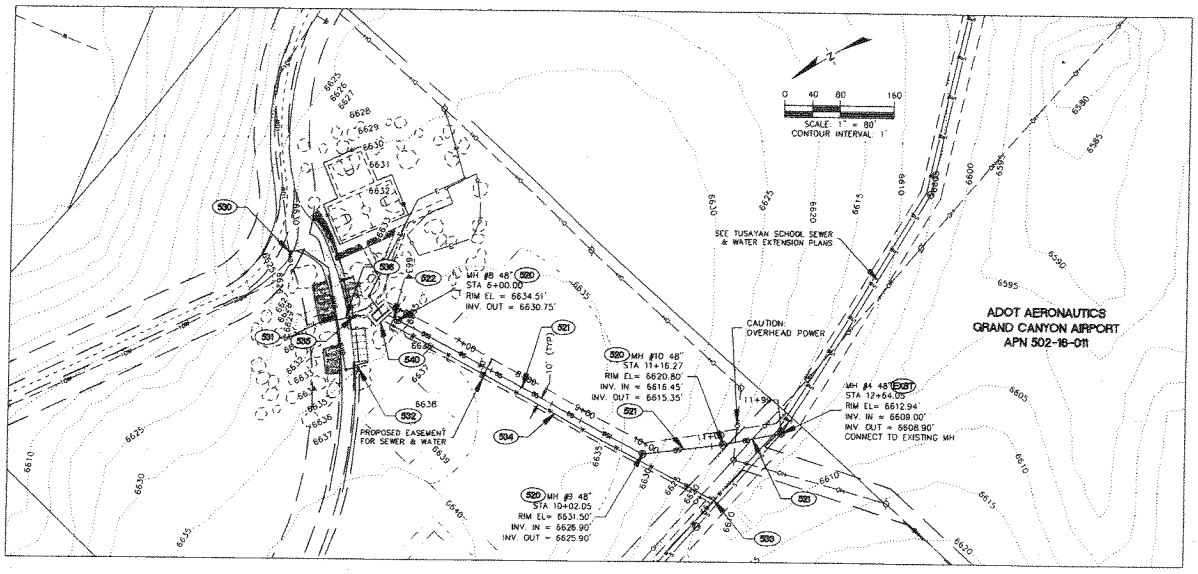
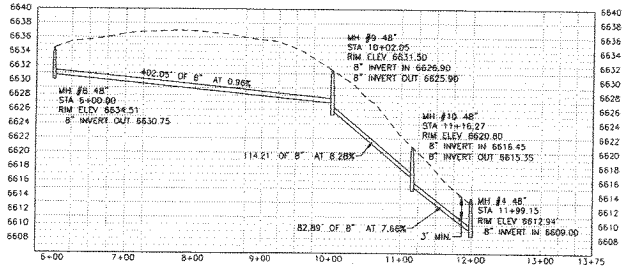
TUSAYAN COMMUNITY PARK
CDBG IMPROVEMENTS

PAVING, GRADING
& DRAINAGE

HOR SCALE:	1" = 20'
VERT SCALE:	
DATE:	11/18/14
PROJECT NO.:	114682
AGENCY NO.:	
SHEET NO.:	4 OF 6

DESIGNED BY: MRW
DRAWN BY: MRW
CHECKED BY: MAS





CONSTRUCTION NOTES
PUBLIC IMPROVEMENTS

(520) (3 EA) INSTALL 48" SEWER MANHOLE TYPE 'A' PER MAG SD 420-1 & 420-2.

(521) (600 L.F.) INSTALL 8" PVC SEWER PIPE PER MAG SS 615.

(522) (15 L.F.) INSTALL 4" PVC SEWER SERVICE PIPE PER MAG SS 615.

(530) (1 EA) WET TAP NEW 8" PVC RECLAIMED WATER LINE TO EXISTING 10" RECLAIMED WATER LINE PER GRAND CANYON SANITARY DISTRICT STANDARDS AND MAG SS 616.

(531) (210 L.F.) INSTALL 8" PVC RECLAIMED WATER LINE PER GRAND CANYON SANITARY DISTRICT STANDARDS AND MAG SS 616.

(532) (1 EA) INSTALL RECLAIM WATER FIRE HYDRANT ASSEMBLY IN ACCORDANCE WITH GRAND CANYON SANITARY DISTRICT STANDARDS AND MAG SD 360-1 WITH 8" MJ X 6" FLANGE TEE, 6" FLANGE X 6" MJ VALVE, VALVE BOX AND COVER. ITEM INCLUDES 20' OF 6" DIP AND 2 - 6" BOLLARDS PER MAG SD 140.

(533) (1 EA) TAP 8" WATER MAIN AND INSTALL 1 1/2" WATER METER PER HYDRO SYSTEMS STANDARDS AND MAG SS 610, WITH VALVE BOX AND COVER.

(534) (525 L.F.) INSTALL 1 1/2" COPPER WATER SERVICE LINE PER MAG SS 610.

(535) (1 EA) TAP 8" RECLAIM WATER MAIN AND INSTALL 1 1/2" WATER METER PER GRAND CANYON SANITARY DISTRICT STANDARDS AND MAG SS 616, WITH VALVE BOX AND COVER.

(536) (40 L.F.) INSTALL 1 1/2" RECLAIM WATER SERVICE LINE PER MAG SS 616.

(540) CONTRACTOR SHALL COORDINATE WITH PLUMBER FOR SEWER, WATER AND RECLAIM WATER SERVICE LINE EXTENSIONS AND TIE-IN TO BUILDING PLUMBING.

CONTRACTOR SHALL USE UTMOST CAUTION TO PROTECT THE NATURAL VEGETATION AND EXISTING TREES AND HYDRO-SEED ALL NATIVE AREAS DISTURBED DURING CONSTRUCTION. COST IS CONSIDERED INCIDENTAL AND INCLUDED IN BID ITEMS.

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

GENERAL NOTES

FIELD TOPOGRAPHY AND BOUNDARY SURVEY INFORMATION USED TO PREPARE THIS DRAWING IS FROM USGS QUAD MAP TUSAYAN WEST.

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114682

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11/18/2014

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TOWN OF TUSAYAN
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(OUTSIDE MARICOPA COUNTY)

FM SEWER & WATER

REVISIONS

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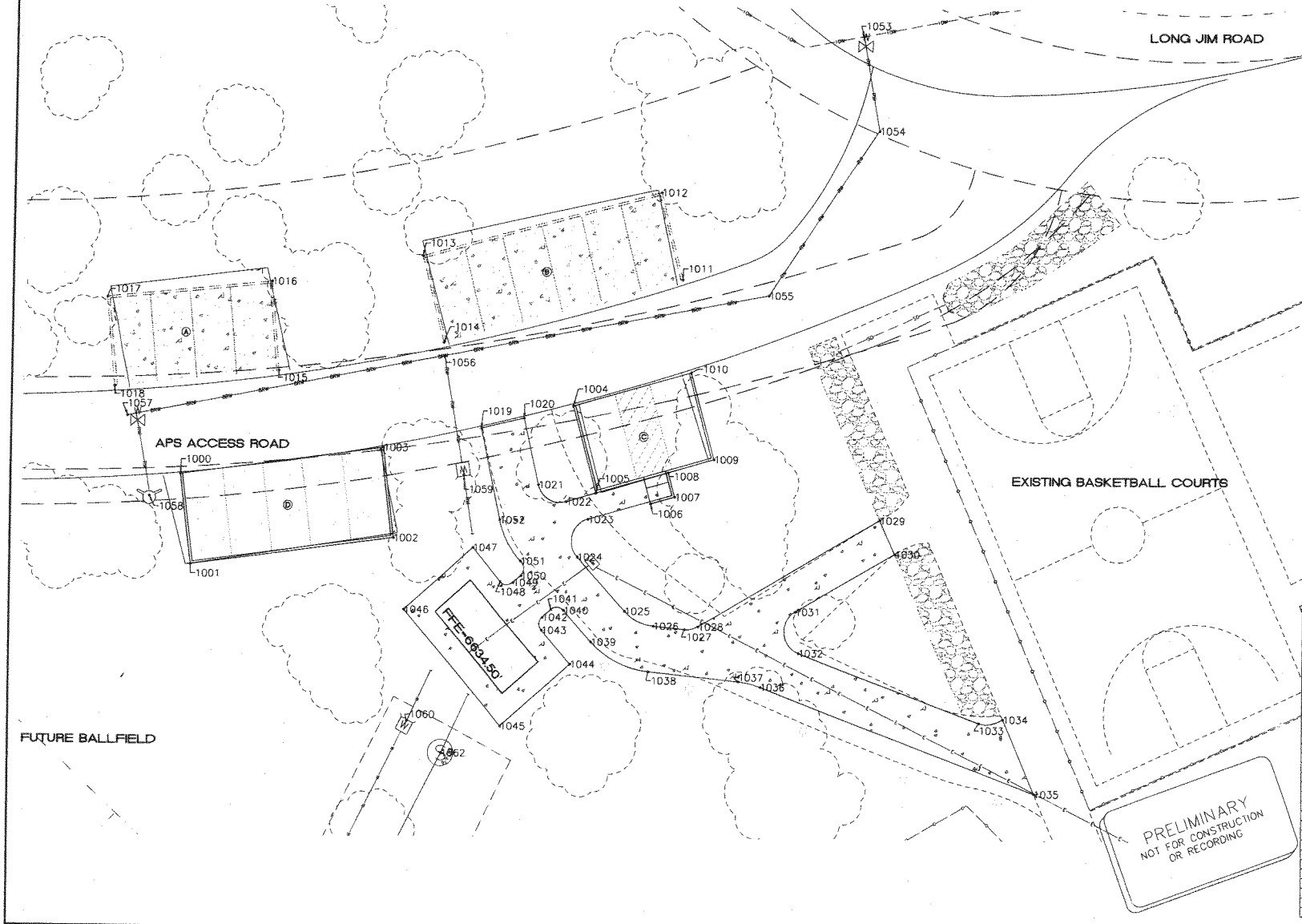
TUSAYAN COMMUNITY PARK
CDBG IMPROVEMENTS

SEWER & WATER
PLAN

HOR SCALE: 1" = 80'
VERT SCALE: 1" = 8'
DATE: 11/18/14
PROJECT NO.: 114682
AGENCY NO.:
SHEET NO.: 5 OF 5

DESIGNED BY: RMW
DRAWN BY: RMW
CHECKED BY: RKS



CONTROL POINTS

POINT	NORTHING	EASTING	DESCRIPTION
1000	1809209.79	635777.87	TBC
1001	1809199.30	635780.41	TBC
1002	1809196.24	635825.02	TBC
1003	1809213.73	635823.48	TBC
1004	1809234.97	635896.10	TBC
1005	1809206.21	635871.49	TBC
1006	1809203.98	635883.38	TBC
1007	1809205.47	635888.86	TBC
1008	1809210.72	635887.36	TBC
1009	1809213.88	635897.44	TBC
1010	1809232.42	635892.05	TBC
1011	1809252.68	635889.77	TBC
1012	1809271.53	635884.78	TBC
1013	1809257.45	635831.61	TBC
1014	1809238.60	635836.60	TBC
1015	1809232.30	635796.93	TBC
1016	1809251.70	635797.76	TBC
1017	1809248.14	635760.93	TBC
1018	1809228.73	635762.81	TBC
1019	1809220.04	635846.46	S/W
1020	1809222.26	635855.21	S/W
1021	1809207.95	635858.61	S/W
1022	1809204.30	635864.85	S/W
1023	1809200.54	635866.85	S/W
1024	1809192.35	635867.54	S/W
1025	1809180.66	635878.25	S/W
1026	1809177.46	635884.63	S/W
1027	1809176.77	635891.54	S/W
1028	1809177.41	635894.54	S/W
1029	1809200.85	635906.09	S/W
1030	1809193.57	635936.48	S/W
1031	1809180.86	635916.48	S/W
1032	1809171.84	635917.26	S/W
1033	1809156.93	635957.58	S/W
1034	1809157.75	635962.96	S/W
1035	1809141.58	635970.06	S/W
1036	1809164.35	635908.69	S/W
1037	1809165.59	635903.74	S/W
1038	1809167.51	635883.64	S/W
1039	1809173.90	635870.88	S/W
1040	1809180.73	635864.63	S/W
1041	1809180.88	635861.83	S/W
1042	1809179.21	635859.93	S/W
1043	1809176.38	635858.76	S/W
1044	1809168.01	635866.26	S/W
1045	1809155.45	635860.88	S/W
1046	1809180.71	635828.62	S/W
1047	1809194.28	635844.00	S/W
1048	1809186.89	635850.50	S/W
1049	1809186.71	635853.32	S/W
1050	1809188.20	635855.02	S/W
1051	1809191.46	635854.56	S/W
1052	1809201.28	635850.13	S/W
1053	1809395.43	635929.83	RECLAIM WATER
1054	1809285.14	635903.66	RECLAIM WATER
1055	1809248.38	635908.24	RECLAIM WATER
1056	1809255.73	635836.62	RECLAIM WATER
1057	1809222.31	635766.68	RECLAIM WATER
1058	1809205.02	635770.90	RECLAIM WATER
1059	1809209.96	635841.58	RECLAIM WATER
1060	1809156.40	635829.60	WATER
1061	1808990.38	635990.32	WATER
1062	1809149.52	635857.33	MH #8
1063	1808791.87	635853.67	MH #9
1064	1808678.55	635967.93	MH #10

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11/18/2014

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TOWN OF TUSAYAN
CONSTRUCTION PLANS

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FN: CONTROL

REVISIONS:

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FLAGSTAFF, AZ 86001
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TUSAYAN COMMUNITY PARK
CDBG IMPROVEMENTS

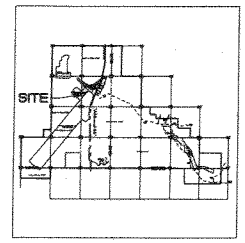
CONTROL
PLAN

HOR. SCALE: 1" = 10'
VERT. SCALE:
DATE: 11/18/14
PROJECT NO.: 114682
AGENCY NO.:
SHEET NO.: 6 OF 6

DESIGNED BY: RMW
DRAFTED BY: RMW
CHECKED BY: RAS

CONSTRUCTION PLANS
TUSAYAN SCHOOL SEWER AND WATER EXTENSION

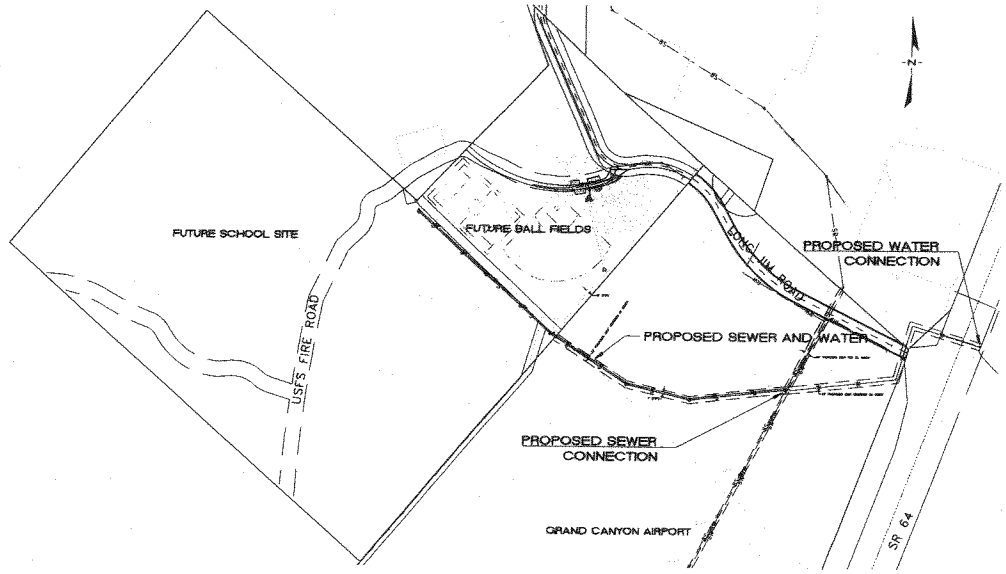
PORTION OF SECTIONS 23 & 24, TOWNSHIP 30 NORTH, RANGE 2 EAST,
GILA AND SALT RIVER MERIDIAN,
TOWN OF TUSAYAN, COCONINO COUNTY, ARIZONA



VICINITY MAP
TUSAYAN, ARIZONA (NOT TO SCALE)

LEGEND

- STRUCTURE, EXISTING
- CONCRETE, EXISTING
- CONCRETE, PROPOSED
- ASPHALT, EXISTING
- ASPHALT, PROPOSED
- GRAVEL, EXISTING
- CURB, PROPOSED
- ROAD CENTERLINE, EXISTING
- RIGHT OF WAY, EXISTING
- LOT LINE, EXISTING
- BUILDING EDGE, EXISTING
- MAJOR CONTOUR, EXISTING
- MINOR CONTOUR, EXISTING
- OVERHEAD ELECTRIC LINE, EXISTING
- GAS LINE, EXISTING
- WATER LINE, EXISTING
- SANITARY-SEWER LINE, EXISTING
- CHAIN LINK FENCE, EXISTING
- BARBED WIRE FENCE, EXISTING
- WOOD FENCE, EXISTING
- FLOW, PROPOSED
- GAS METER, EXISTING
- GAS VALVE, EXISTING
- WATER METER, EXISTING
- WATER VALVE, EXISTING
- FIRE HYDRANT, EXISTING
- SANITARY-SEWER MANHOLE, EXISTING
- MAIL BOX, EXISTING
- MAIL BOX, NEW
- LIGHT POLE, EXISTING
- GUY ANCHOR, EXISTING
- UTILITY POLE, EXISTING
- SIGN POST, EXISTING
- BOLLARD, EXISTING
- SET 1/2" REBAR WITH "CONTROL POINT" CAP



SHEET INDEX

1	COVER SHEET
2	NOTES & QUANTITIES SHEET
3	DETAIL SHEET
4	WATER PLAN AND SEWER PLAN & PROFILE SHEET
5	WATER PLAN SHEET

60% PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

SURVEY NOTES

NO FIELD MEASUREMENTS WERE MADE TO PREPARE THIS MAP. EXISTING IMPROVEMENTS AND TOPOGRAPHY SHOWN WERE TAKEN FROM AERIAL PHOTOGRAPHS.

BASIS OF ELEVATIONS: ELEVATIONS AND CONTOURS SHOWN ARE DERIVED FROM USGS QUAD MAPS AND ARE ILLUSTRATIVE ONLY AND NOT MEANT TO CONVEY ACTUAL FIELD CONDITIONS. CONTRACTOR SHALL VERIFY AND ADHERE TO THE RELATIONSHIP OF PROPOSED TO "EXISITNG" ELEVATIONS.

AVERAGE ELEVATION: 6640.00 FEET (NAVD88)

NO EXCAVATIONS OR OTHER DIRECT DETERMINATIONS OF UNDERGROUND UTILITY LOCATIONS WERE MADE. INFORMATION CONCERNING UNDERGROUND UTILITIES SHOULD BE REGARDED AS APPROXIMATE ONLY.

FLOOD ZONE

THIS SURVEY LIES ENTIRELY WITHIN FLOOD ZONE "X" PER FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER 040050C3825G, DATED SEPTEMBER 3, 2010, PANEL 3825 OF 8475, COCONINO COUNTY, ARIZONA AND INCORPORATED AREAS, BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. FLOOD ZONE "X" IS DESIGNATED AS AREAS OF LESS THAN 0.2% ANNUAL CHANCE FLOOD. NO BASE FLOOD ELEVATIONS ARE DETERMINED.

WOODSON
ENGINEERING AND SURVEYING, INC.
124 N. ELDEN ST.
FLAGSTAFF, AZ 86001
PHONE: (928) 774-4636 FAX: (928) 774-4646

UTILITY ACKNOWLEDGMENT

ARIZONA PUBLIC SERVICE DATE

TOWN APPROVAL

TOWN OF TUSAYAN DATE

CONCEPT APPROVAL
THE TOWN OF TUSAYAN APPROVES THESE PLANS FOR CONCEPT ONLY. ALL LIABILITY FOR ERRORS OR OMISSIONS IS THE RESPONSIBILITY OF THE DESIGN ENGINEER.

AUTHORIZATION TO CONSTRUCT
THE SIGNATURES ABOVE ARE REQUIRED BEFORE THE CONTRACTOR CAN COMMENCE. UNSIGNED, THESE PLANS HAVE NOT BEEN COMPLETED WITH RESPECT TO AGENCY REVIEW AND APPROVAL.

OWNER
TOWN OF TUSAYAN
845 MUSTANG DR.
TUSAYAN, AZ 86023
(928) 638-9909

ENGINEER
WOODSON ENGINEERING AND SURVEYING, INC.
124 N. ELDEN ST.
FLAGSTAFF, AZ 86001
(928) 774-4636

WOODSON ENGINEERING AND SURVEYING, INC.
124 N. ELDEN ST. • FLAGSTAFF, AZ 86001 • PHONE: (928) 774-4636 FAX: (928) 774-4646

11/4/14

114682

TUSAYAN SCHOOL SEWER AND WATER
TOWN OF TUSAYAN
CONSTRUCTION PLANS

DRAFTED BY: MBP
DES. BY: CLT/MBP
PROJ. NO.: 114682
FILE: 01 SEWER.dwg

Woodson Engineering Survey Inc.
124 N. Elden St.
Flagstaff, AZ 86001

60% Opinion of Probable Cost

Item No.	Item Description	Unit	Quantity	Price	Amount
1	48" SEWER MANHOLE MAG SD 420	EACH	7	$4,000.00	$28,000.00
2	8" PVC SEWER PIPE	L.FT.	1,888	$85.00	$160,480.00
3	8" VALVE W/TAPPING SLEEVE	EACH	1	$4,250.00	$4,250.00
4	8" PVC WATER PIPE	L.FT.	2,821	$85.00	$239,785.00
5	8" PVC WATER PIPE IN EXISTING SLEEVE	L.FT.	100	$150.00	$15,000.00
6	WATERLINE ENCASEMENT PER MAG SS 610	L.SUM	1	$1,000.00	$1,000.00
7	2" CURB STOP MAG SD 390	EACH	1	$1,500.00	$1,500.00
				Subtotal	**$450,015.00**
8	FURNISH WATER SUPPLY (0.5%)	L.SUM	1	$2,250.08	$2,250.08
9	EROSION CONTROL (1%)	L.SUM	1	$4,500.15	$4,500.15
10	CONSTRUCTION SURVEYING AND LAYOUT (2%)	L.SUM	1	$9,000.30	$9,000.30
				Subtotal	**$15,750.53**
11	MOBILIZATION (5%)	L.SUM	1	$22,500.75	$22,500.75
				Subtotal for Mobilization	**$22,500.75**
	ENGINEERING CONTINGENCIES (2.5%)	L.SUM	1	$11,250.38	$11,250.38
	PUBLIC RELATIONS	L.SUM	1	$1,500.00	$1,500.00
	CONSTRUCTION ADMINISTRATION (5%)	L.SUM	1	$22,500.75	$22,500.75

THIS ESTIMATE IS BASED ON THE PLANS FOR THE PROJECT DATED 11/17/2014.
THIS OPINION OF PROBABLE COST IS MADE ON THE BASIS OF OUR EXPERIENCE AND QUALIFICATIONS AND REPRESENTS OUR BEST JUDGEMENT. HOWEVER, SINCE SO MANY ASPECTS OF COSTS ARE BEYOND OUR CONTROL, WE CANNOT AND DO NOT GUARANTEE THAT COSTS WILL NOT VARY FROM THIS OPC.

Total Project Cost **$523,517.40**