



DEPARTMENT OF PUBLIC WORKS  
TOWN ENGINEER

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**INTEROFFICE MEMORANDUM**

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**TO:** Josh Wright, Assistant to the Town Manager  
**FROM:** Keith Brann, P.E.,CFM, Town Engineer  
**SUBJECT:** Building Safety permit and review fees  
**DATE:** October 23, 2009  
**CC:** Kevin Kish, General Manager Development Services  
Tim Mattix, Records Retention Manager

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The Town Council passed ordinance 2009.12 adopting new building permit fee schedules and valuation methods in June of 2009 to be implemented in fiscal year 2010. The actual schedules and valuation methods are depicted in resolution 2009-88 also adopted in June of 2009. Significant changes in this new ordinance and resolution from prior building permit methodology include a new valuation method using International Code Council (ICC) tables for valuation and removing some permits from an a la carte method of permit fees and placing them in the valuation based permitting method. At the time, the position of staff was that moving to the ICC tables of valuation would not cause a significant change in building valuation and subsequently permit fee. **It is important to note that once a valuation is arrived at, the permit fee calculation is the same before and after ordinance 2009.12 and resolution 2009-88 (except for what appears to be a \$0.75 typo in base fee for valuations between \$25,001 to \$50,000).** Recent permit activity and questions from applicants has prompted staff to review the valuations between previous and current methods and make recommendations if any for adjustments.

As an example of how fees have been applied over time, an example for a 30,000 square foot church with a height of 24 feet and a fire rating of type IIB will be put though the various building fee ordinances.

**Ordinance 77.10 amended and Ordinance 82.05:** The Town's original building code is in ordinance 77-10 amended. Ordinance 82.05 kept the same valuation method. They use \$0.01 per cubic foot for building plan review and \$0.001 per cubic foot for inspection. The permit fee under this simplified approach would be:

$$(30,000*24)*0.011 = \$7,920$$

**Ordinance 95.32:** The next ordinance calculation is poorly written. Ordinance 95.32 states that the base permit fee is a square foot factor multiplied by the square footage of a building with a plan review fee that is 65% of the base permit fee and also multipliers for mechanical (20%), plumbing (24%) and electrical (30%). Based upon subsequent ordinances, it is clear that this method generates a valuation that then requires a second step of assigning a base fee based upon the valuation. From what I have been able to determine (records are lacking), once the valuation is determined the base permit fee calculation uses the same table for the next 14 years up to ordinance 2009.12 (again forgetting the \$0.75 typo for base fee of valuations between \$25,001 and \$50,000). This table is attached at the end of the white paper. Note that the valuations are now based upon type of construction, fire rating and square feet. The square foot factor for Church with type IIB fire rating is \$59.80. The source of valuations is not cited.

$$(30,000*59.8) = \$1,794,000 \text{ value}$$

$$\$1,794,000 \Rightarrow (\$5,608.75+(3.65*794))*2.49 = \$21,182$$

**Ordinances 2001.04, 2005.16 and 2006.07:** These ordinances pulled in national valuation data from the International Conference of Building Officials April 2000 valuation data as the basis for building valuation. All valuations appear to have gone down from the valuations used in Ordinance 95.32. The new square foot factor for the church is \$54.20. Ordinance 2001.04 and its accompanying resolution do not state how the valuation is applied for base fee, utilities and plan check fee. Ordinances 2005.16 and 2006.07 was the Town's first comprehensive fee ordinances meant to collate all Town fees into a single ordinance for ease of reference, removal of duplicated fees between departments and to allow ease of modifying fees at the fiscal year. These ordinances were explicit in how fees are calculated. Assuming that the later ordinances were only an update of the methodology, I will show the formula based on those methodologies (base fee plus 25% for each electrical, plumbing and mechanical and 65% for plan check). **Note that the valuation factor remained fixed from ordinance 2001.04 until ordinance 2009.12 – 8 years.**

$$(30,000*54.20) = \$1,626,000 \text{ value}$$

$$\$1,626,000 \Rightarrow (\$5,608.75+(3.65*626))*2.40 = \$18,945$$

**Ordinance 2009.12:** This ordinance changed the valuation factor from the International Conference of Building Officials April 2000 valuation data to the most current version of the International Code Council Valuation data and provided for the Town to continually monitor and use the latest ICC data – published biannually. Since the Town has not updated its cost tables for 8 years, the change is dramatic mainly due to the housing and construction global boom during the intervening years. The square foot factor for the same church is now \$172.08. Permit fee once valuation is determined is the same as for the prior ordinances.

$$(30,000 * 172.08) = \$5,162,400 \text{ value}$$

$$\$5,162,400 \Rightarrow (\$5,608.75 + (3.65 * 4,162.4)) * 2.40 = \$42,071$$

The following table recaps these fees and shows the percent increases or decreases over time for Marana fees and an independent source of building valuations – the ENR building index. The building fees are based upon the International Council of Building Officials (ICBO) since 2001 evolving into the International Code Council (ICC) valuations in 2009. The ICC is made up of many previous organizations include the ICBO.

	Ordinance 77.10 82.05	Ordinance 95.32	Ordinance 2001.04 2005.16 2006.07	Ordinance 2009.12
Church 30,000 sf Type IIB	\$7,920	\$21,182	\$18,945	\$42,071
Fee change		NA	11% decrease	122% increase
ENR building index change over same period		NA	13% increase	35% increase
change from 95.32 to 2009.12		99% increase for Marana fees 53% increase in ENR building index		

This exercise will now be repeated for residential track housing. Pulling a random model home permit of B0402-033 yields a 1601 sf home of wood construction, type VA. I will assume a height of 9 feet for use in calculating fees under ordinance 77.10 and 82.05.

**Ordinance 77.10 amended and ordinance 82.05**

$$(1601*9)*0.011 = \$158$$

**Ordinance 95.32**

$$(1601*56.70) = \$90,776.70 \text{ value}$$

$$\$90,776.70 \Rightarrow (\$643.75+(7.00*41))*2.49 = \$2,318$$

**Ordinances 2001.04, 2005.16 and 2006.07**

$$(1601*51.57) = \$82,563.57 \text{ value}$$

$$\$82,563.57 \Rightarrow (\$643.75+(7.00*33))*2.40 = \$2,099$$

**Ordinance 2009.12**

$$(1601*108.33) = \$173,436.33 \text{ value}$$

$$\$173,436.33 \Rightarrow (\$993.75+(5.60*74))*2.40 = \$3,380$$

	Ordinance 77.10 82.05	Ordinance 95.32	Ordinance 2001.04 2005.16 2006.07	Ordinance 2009.12
Residence 1601 sf Type VA wood	\$158	\$2,318	\$2,099	\$3,380
Fee change		NA	9% decrease	61% increase
ENR building index change over same period		NA	13% increase	35% increase
change from 95.32 to 2009.12		46% increase for Marana fees 53% increase in ENR building index		

## Conclusions and recommendations:

The building fees have not been updated on a consistent basis over time and as a result permit fee revenue has not kept pace with the increased cost of construction – especially during the building boom of 2004-2006. Also during these time periods the consumer price index has consistently increased which drives wages and cost recovery needs for permit review and inspection staff.

The new ICC tables are an evolution from prior ICBO tables that the Town has used. Therefore updating to the new ICC tables is not a new valuation methodology, but rather a long overdue indexing of fees. The current ordinance allows indexing twice a year, though I would recommend indexing only once a year by checking the February numbers and implementing at the fiscal year when other fees change. Regular indexing will avoid these large jumps in valuations.

The fee methodology takes a building valuation and then runs that valuation through a table to determine permit fees. An analysis of the table is attached to this white paper and is an approximation of an exponential curve – though the curve ceases to be exponential after a one million dollar valuation and remains linear from that point on. The \$100,001 mark is where the table significantly increases in permit fee to valuation ratio. Therefore, more expensive valuations will see a significant effect in permit costs due to the new ICC tables – especially those valuations that move from under \$100,000 to over \$100,001.

The increase in valuations for normal residential track housing from the ICC is comparable to the other leading index for building costs from the Engineering News Record. The new valuation method does however bring SFR construction from around \$90,000 to \$172,000 which makes the permit fall in the over \$100,001 range as mentioned before. Not only does the valuation cause a higher permit fee, but the formula table itself now drives a higher fee by the valuation moving to a steeper portion of the permit curve.

It has been suggested that since the 2009 ordinance valuation factors are significantly higher than just before the ordinance passed we could phase in the increases. It must always be noted that the valuations have increased significantly from 2001, not from just before the 2009 ordinance. If the residential permit fees have increased 50% then a portion of the increase could be implemented now and then build up to the full fee over time (example if the old fee is 50% of new, then we could use new valuations with a 67% multiplier for one year followed by a 83% multiplier the second year with full valuations in the third year). If this is applied to the building permits from above, then the fees would be:

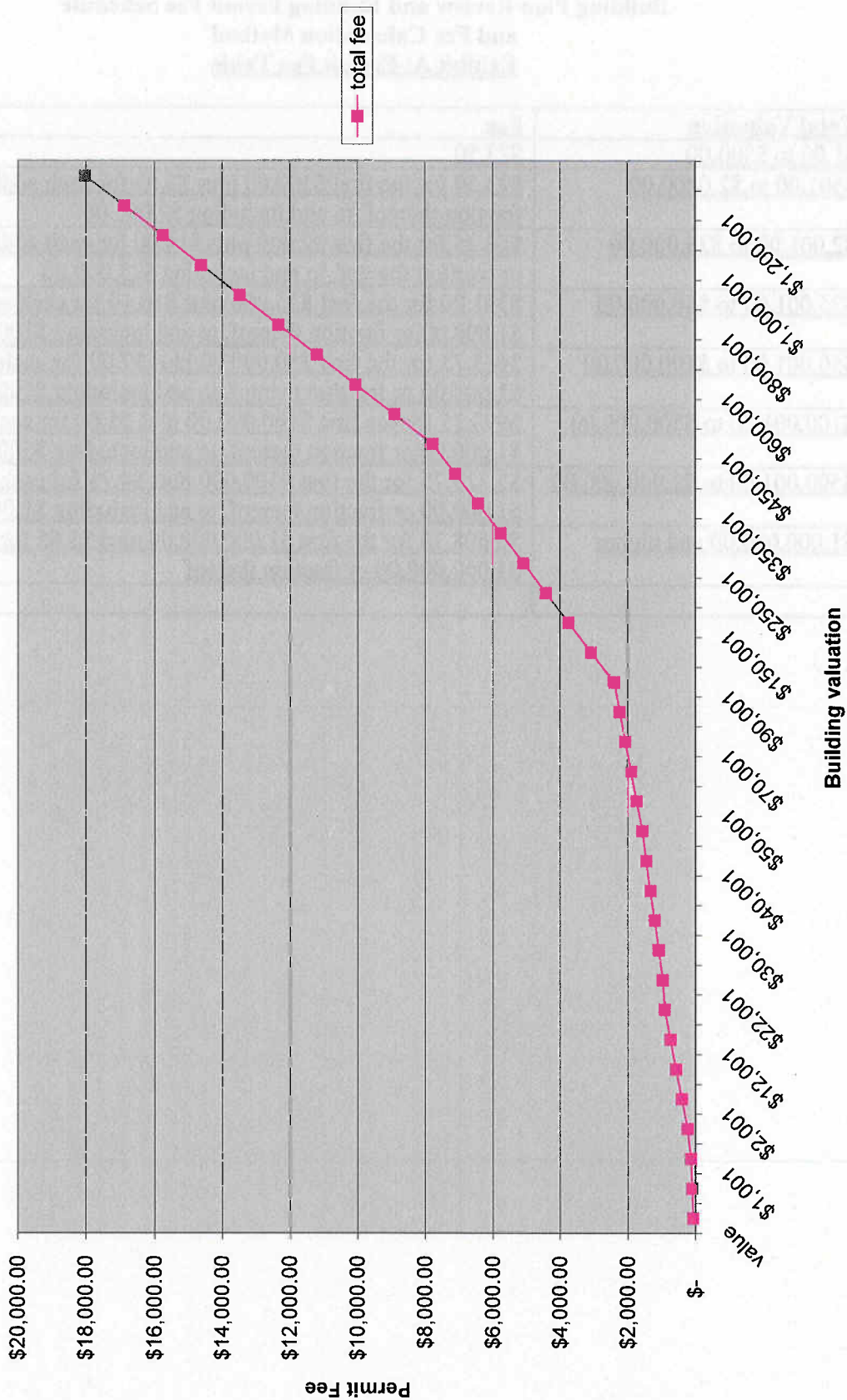
	Previous Ordinance 2006.07	Ordinance 2009.12 67%	Ordinance 2009.12 83%	Ordinance 2009.12 Full fee
Residence 1601 sf Type VA wood	\$2099	\$2,265	\$2,805	\$3,380
Church 30,000 sf Type IIB	\$18,945	\$28,188	\$34,919	\$42,071

Such a strategy is counterintuitive to appropriate valuation to permit formulae and must be considered only as a political or economic development strategy. Are the current valuations and therefore fees inhibiting construction? If they are not, then I see no reason to phase them. Recent building permit activity would suggest that housing is recovering on its own and that no modification to Town ordinance is necessary.

**Marana Development Services  
 Building Plan Review and Building Permit Fee Schedule  
 and Fee Calculation Method  
Exhibit A: Permit Fee Table**

<u>Total Valuation</u>	<u>Fee</u>
<u>\$1.00 to \$500.00</u>	<u>\$23.50</u>
<u>\$501.00 to \$2,000.00</u>	<u>\$23.50 for the first \$500.00 plus \$3.05 for each additional \$100.00, or fraction thereof, to and including \$2,000.00</u>
<u>\$2,001.00 to \$25,000.00</u>	<u>\$69.25 for the first \$2,000 plus \$14.00 for each additional \$1,000.00 or fraction thereof, to and including \$25,000.00</u>
<u>\$25,001.00 to \$50,000.00</u>	<u>\$391.00 for the first \$25,000 plus \$10.10 for each additional \$1,000.00 or fraction thereof, to and including \$100,000.00</u>
<u>\$50,001.00 to \$100,000.00</u>	<u>\$643.75 for the first \$50,000.00 plus \$7.00 for each additional \$1,000.00 or fraction thereof, to and including \$100,000.00</u>
<u>\$100,001.00 to \$500,000.00</u>	<u>\$993.75 for the first \$100,000.00 plus \$5.60 for each additional \$1,000.00 or fraction thereof, to and including \$500,000.00</u>
<u>\$500,001.00 to \$1,000,000.00</u>	<u>\$3,223.75 for the first \$500,000 plus \$4.75 for each additional \$1,000.00 or fraction thereof, to and including \$1,000,000.00</u>
<u>\$1,000,000.00 and higher</u>	<u>\$5,608.75 for the first \$1,000,000.00 plus \$3.65 for each additional \$1,000,000.00 or fraction thereof</u>

# Permit Fee versus Building Valuation



## MARANA ORDINANCE NO. 2009.12

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RELATING TO BUILDING; ADOPTING THE BUILDING PLAN REVIEW AND BUILDING PERMIT FEE SCHEDULE AND FEE CALCULATION METHOD; AND DESIGNATING AN EFFECTIVE DATE

WHEREAS the Town Council is authorized by A.R.S. § 9-240 (A) to control the finances of the Town; and

WHEREAS Town staff conducted a comprehensive review of all Town of Marana fees, including cost-of-service analyses and comparison to comparable jurisdictions, in an effort to update and centralize Town fees and ensure consistency among all fees throughout the Town; and

WHEREAS Town staff created a Town of Marana building plan review and building permit fee schedule and fee calculation method based on its review as well as the most recently published International Code Council Building Valuation Data, and any additional published general construction valuation data; and

WHEREAS the Town Council finds that adoption of the building plan review and building permit fee schedule and fee calculation method is in the best interests of the Town and its residents.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and Council of the Town of Marana, Arizona, as follows:

SECTION 1. The Town of Marana building plan review and building permit fee schedule and fee calculation method, three copies of which are on file in the office of the Town Clerk of the Town of Marana, Arizona, which was made a public record by and attached as Exhibit A to Resolution No. 2009-88 of the Town of Marana, Arizona, is hereby referred to, adopted and made a part of this Ordinance as if fully set out here.

SECTION 2. The various town officers and employees are authorized and directed to perform all acts necessary or desirable to give effect to this Ordinance.

SECTION 3. All ordinances, resolutions, or motions and parts of ordinances, resolutions, or motions of the Council in conflict with the provisions of this Ordinance are hereby repealed, effective as of the effective date of this Ordinance.

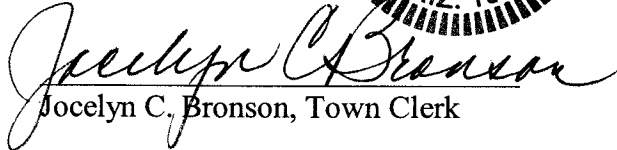
SECTION 4. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions hereof.

SECTION 5. This ordinance shall become effective on the thirty-first day after its adoption.

PASSED AND ADOPTED by the Mayor and Council of the Town of Marana, Arizona, this 9<sup>TH</sup> day of June, 2009.



ATTEST:

  
Jocelyn C. Bronson, Town Clerk



Mayor Ed Honea

APPROVED AS TO FORM:

  
FOR Frank Cassidy, Town Attorney