

STATE OF MINNESOTA

TAX COURT

COUNTY OF WASECA

REGULAR DIVISION

Guardian Energy, LLC,

Petitioner,

vs.

Case Nos.: 81-CV-10-365

81-CV-11-348

County of Waseca,

81-CV-11-741

Respondent.

Filed: May 16, 2017

**ORDER GRANTING IN PART AND DENYING IN PART
WASECA COUNTY'S MOTION FOR AMENDED FINDINGS;
AMENDED FINDINGS OF FACT AND CONCLUSIONS OF LAW
CONCERNING OBSOLESCENCE AND
ORDER FOR JUDGMENT**

These matters came before The Honorable Joanne H. Turner, Chief Judge of the Minnesota Tax Court, on remand from the Minnesota Supreme Court.

Thomas R. Wilhelmy and Masha M. Yevzelman, Fredrikson & Byron, P.A., represent petitioner Guardian Energy, LLC.

Marc J Manderscheid and Michael M. Sawers, Briggs and Morgan, P.A., and Brenda Miller, Waseca County Attorney, represent respondent Waseca County.

At issue in these cases is the value as of January 2, 2009, January 2, 2010, and January 2, 2011, of Guardian's ethanol production facility near Janesville in rural Waseca County. At trial, the appraisers for each party made substantial reductions for economic obsolescence to their respective opinions of value under the cost approach: Guardian by one-third as of each valuation date, the County by as much as 45% (for the 2009 valuation date).

We concluded that Guardian failed to meet its burden of proof with respect to economic obsolescence based on lower prices for commercial properties, but economic obsolescence could nevertheless result from an excess supply of ethanol production facilities. We therefore calculated excess domestic production capacity in the ethanol industry as of each valuation date, and adopted those figures as measures of economic obsolescence at the subject property. Even with these reductions, we found the value of the subject property exceeded its assessed value as of each valuation date. *Guardian Energy, LLC v. Cty. of Waseca*, No. 81-CV-10-365 et al., 2014 WL 7476215 (Minn. T.C. Dec. 9, 2014).

Guardian appealed our decision to the Minnesota Supreme Court, which reversed solely on the issue of economic obsolescence. *Guardian Energy, LLC v. Cty. of Waseca*, 868 N.W.2d 253 (Minn. 2015). On remand, we concluded that our initial measure of economic obsolescence—excess production capacity—was not supported by the record. *Guardian Energy, LLC v. Cty. of Waseca*, No. 81-CV-10-365 et al., 2016 WL 5874449 (Sept. 28, 2016). Applying a different approach, we found economic obsolescence only in 2010 based on the fact that the subject property had not generated the market-required rate of return during that year.

Waseca County moved for amended findings of fact and conclusions of law. While the County's motion was pending, Guardian appealed our 2016 decision. The supreme court has stayed its proceedings to allow us to address the County's motion. These amended findings of fact and conclusions of law constitute our determination of the market value of the subject property as of the valuation dates at issue, and supersede in its entirety our 2016 decision.

Based upon all the files, records, and proceedings herein, the court now makes the following:

FINDINGS OF FACT

1. The Waseca County Assessor valued the subject property at \$24,167,000 as of January 2, 2009; \$22,157,600 as of January 2, 2010; and \$26,564,200 as of January 2, 2011.
2. The fee simple market value of the subject property as of January 2, 2009, was \$33,866,400.
3. The fee simple market value of the subject property as of January 2, 2010, was \$29,544,600.
4. The fee simple market value of the subject property as of January 2, 2011, was \$29,725,300.

CONCLUSIONS OF LAW

1. Petitioner submitted sufficient credible evidence to rebut the presumptive validity of the assessed value as of each valuation date.
2. The Waseca County Assessor's estimated market value of the subject property as of January 2, 2009, understated its market value as of that date.
3. The Waseca County Assessor's estimated market value of the subject property as of January 2, 2010, understated its market value as of that date.
4. The Waseca County Assessor's estimated market value of the subject property as of January 2, 2011, understated its market value as of that date.

ORDER FOR JUDGMENT

1. The assessor's estimated market value for the subject property as of January 2, 2009, shall be increased on the books and records of Waseca County from \$24,167,000 to \$33,866,400.

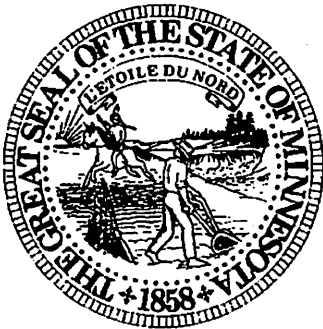
2. The assessor's estimated market value for the subject property as of January 2, 2010, shall be increased on the books and records of Waseca County from \$22,157,600 to \$29,544,600.

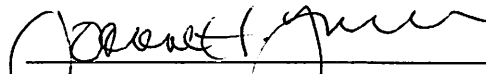
3. The assessor's estimated market value for the subject property as of January 2, 2011, shall be increased on the books and records of Waseca County from \$26,564,200 to \$29,725,300.

4. Real estate taxes due and payable in 2010, 2011, and 2012 shall be recomputed accordingly and refunds, if any, paid to petitioner as required by such computations, together with interest from the original date of payment.

IT IS SO ORDERED. THIS IS A FINAL ORDER. ENTRY OF JUDGMENT IS STAYED FOR 15 DAYS. LET JUDGMENT BE ENTERED ACCORDINGLY.

BY THE COURT:




Joanne H. Turner, Chief Judge
MINNESOTA TAX COURT

DATED: May 16, 2017

MEMORANDUM

A. PROCEDURAL HISTORY

At issue in these cases is the value as of January 2, 2009, January 2, 2010, and January 2, 2011, of a 100 Mgy (million gallons per year) ethanol production facility owned by petitioner Guardian Energy, LLC, near Janesville in rural Waseca County.

1. 2013 proceedings: determining the scope of the real property to be valued

From the beginning of the case, the parties disputed whether certain buildings, tanks, and other structures located at the Janesville facility were part of the real property subject to taxation. To resolve the dispute, we held an evidentiary hearing in February 2013. After post-trial briefing and closing arguments, we issued findings of fact, determining that each of the disputed structures was properly classified as taxable real property under Minn. Stat. § 272.03, subd. 1 (2014).¹ *Guardian Energy, LLC v. Cty. of Waseca*, No. 81-CV-10-365 et al., 2013 WL 684242 (Minn. T.C. Feb. 21, 2013). Guardian moved for reconsideration of our decision, arguing that we had misinterpreted the meanings of “building,” “structure,” “improvement,” and “fixture,” as found in Minn. Stat. § 272.03, subd. 1(a).² We revised some of the discussion in the memorandum accompanying our decision but did not reclassify any of the disputed buildings, storage tanks, or other structures as personal property. *Guardian Energy, LLC v. Cty. of Waseca*, No. 81-CV-10-365 et al., 2013 WL 8719413 (Minn. T.C. July 9, 2013).

2. 2014 proceedings: determining the value of the real property

Having determined the scope of the real property to be valued, in February 2014 we heard testimony on the value of that real property. After considering the parties’ post-trial submissions, we filed findings of fact, conclusions of law, and an order for judgment concluding that the assessed value of the real property understated its market value as of each of the valuation dates at issue. *Guardian Energy, LLC v. Cty. of Waseca*, No. 81-CV-10-365 et al., 2014 WL 4459133

¹ In 2014, the legislature amended Minn. Stat. § 272.03, subd. 1, to specifically provide that the exterior shell of a structure is not considered real property if it is “primarily used in the production of biofuels, wine, beer, distilled beverages, or dairy products.” Act of May 20, 2014, ch. 308, art. 2, § 9, 2014 Minn. Laws 1875, 1893.

² Pet’r’s Mot. Reconsideration (filed Mar. 27, 2013).

(Minn. T.C. Sept. 5, 2014). The County timely moved for amended findings of fact and conclusions of law. Guardian filed a memorandum opposing certain aspects of the County's motion but not others. In December 2014, we filed amended findings of fact and conclusions of law and order for judgment. *Guardian Energy, LLC v. Cty. of Waseca*, No. 81-CV-10-365 et al., 2014 WL 7476215 (Minn. T.C. Dec. 9, 2014).

(a) Applying the cost approach to value

Our amended findings of fact and conclusions of law concerning value did not rely on the sales comparison approach. *Id.* at *6. We rejected, for various reasons, each of the sales considered by Guardian's expert appraisers, the Shenehon firm. *Id.* at *8-12. The County's expert appraiser, Clay Dodd, considered the sales comparison approach but did not fully develop it. *Id.* at *7. Similarly, we did not rely on the income approach. *Id.* at *6. Although the Shenehon firm estimated the market value of the subject property using the income approach, we rejected its analysis for a number of reasons. *Id.* at *12-14. Mr. Dodd did not employ the approach. *Id.* at *12. We thus based our determination of market value solely on the cost approach. *Id.* at *14; see *S. Minn. Beet Sugar Coop v. Cty. of Renville*, 737 N.W.2d 545, 556 (Minn. 2007) (indicating that "it is not error for a court to rely exclusively on the cost approach when valuing special purpose property").

In applying the cost approach, we first determined the land value of the subject property, relying on sales of comparable parcels of land considered by one or both appraisers, arriving at a value of \$8,500 per acre as of January 2, 2009, and January 2, 2010, and \$9,000 per acre as of January 2, 2011. *Guardian*, 2014 WL 7476215, at *14-17. We next determined the replacement cost of the improvements on the subject property—such as buildings, silos, tanks, fencing, and rail lines—considering and valuing each of the improvements separately. *Id.* at *18-38. In doing so,

we incorporated our February 2013 determination as to which of the improvements was part of the real property.

(b) Adjusting cost for depreciation: the parties' approaches

We then turned to adjustments for depreciation, including physical deterioration, functional obsolescence, and external or economic obsolescence. With one minor difference, we adopted Mr. Dodd's approach to physical deterioration. *Id.* at *41. Neither expert appraiser found any functional obsolescence in the subject property, and we similarly made no adjustment. *Id.*

With respect to external or economic obsolescence, the parties' experts took different approaches. Guardian's experts, the Shenehon firm, applied a discount of one-third, reflecting the difference between \$1.00 per gallon (the "forecast margins for [] ethanol plants") and \$0.666 per gallon (the Shenehon firm's calculation of the subject property's margin).³ The Shenehon firm's one-third discount is less than the 40% decline it found in prices of commercial properties generally during the same time frame, a difference Shenehon justified on the ground that "the subject's [profit] margins are stronger than national averages for ethanol plants."⁴ But, the Shenehon firm noted, it "generally trends with the decline in market prices for commercial and industrial properties resulting from the collapse of the real property bubble, and the sharp decline in economic activity resulting from the banking crisis and the great recession."⁵

The County's appraiser, Mr. Dodd, estimated economic obsolescence by comparing the prices per gallon of production capacity at which other ethanol plants had recently sold to his

³ Ex. 22, at 82-84. Margin is generally the difference between the price of ethanol and the cost of the corn required to produce it. *Id.* at 84.

⁴ Ex. 22, at 83-84.

⁵ Ex. 22, at 84.

estimate of the per-gallon cost of constructing an ethanol plant.⁶ Believing for several reasons that his calculations likely overstated obsolescence, Mr. Dodd subjectively arrived at rates of external obsolescence of 45% as of January 2, 2009; 35% as of January 2, 2010; and 25% as of January 2, 2011.⁷

(c) Adjusting for obsolescence: our conclusions

We rejected the approaches of both experts. We reasoned that Guardian's experts' reliance on the overall market for commercial properties was "insufficient to meet Guardian's burden of proof." *Id.* at *42 (citing *Eurofresh, Inc. v. Graham Cty.*, 187 P.3d 530 (Ariz. Ct. App. 2008)).⁸ First, we noted, the Shenehon firm had simply "assumed, rather than demonstrated, the existence and quantity of external obsolescence." *Id.* "The fact that market values for commercial properties generally declined by 40% between 2006 and 2009 does not establish that the value of ethanol plants declined during the same period, and certainly does not establish that the value of this particular plant declined." *Id.* Nor, we noted, had the Shenehon firm posited "any specific cause of the asserted obsolescence." *Id.* "The general decline in market values for commercial properties was presumably the *effect* of an underlying cause, and was not itself a cause." *Id.* With respect to the County's expert, Mr. Dodd, we agreed with Guardian that his comparison of sale prices of other ethanol plants failed to account for such things as machinery and equipment included in the sale. *Id.* at *44. Nor were we willing to accept Mr. Dodd's calculation of the cost of constructing a new ethanol plant without adequate foundation. *Id.*

⁶ Ex. GG, at 163-64.

⁷ Ex. GG, at 166.

⁸ We previously applied the *Eurofresh* framework in *American Crystal Sugar v. County of Polk*, Nos. C1-05-574 & C4-06-367, 2009 WL 2431376 (Minn. T.C. Aug. 5, 2009).

Although rejecting the parties' approaches to obsolescence, we nevertheless found obsolescence resulting from excess production capacity in the ethanol industry. We did so based on the fundamental principle of supply and demand, namely, that the value of real property is at least to some extent a function of the supply of competitive properties. *Id.* at *43 (citing *Pep Boys v. Cty. of Anoka*, No. C2-01-2780 et al., 2004 WL 2436350, at *6 (Minn. T.C. Oct. 26, 2004)). We calculated excess production capacity in the ethanol industry to be 16% as of January 2, 2009; 8% as of January 2, 2010; and zero as of January 2, 2011; and adopted those figures as measures of external obsolescence. *Id.* We thus arrived at market values for the subject property of \$36,379,100 as of January 2, 2009; \$34,834,200 as of January 2, 2010; and \$38,593,000 as of January 2, 2011. *Id.*

3. Guardian's 2014 appeal to the Minnesota Supreme Court

Guardian sought review by certiorari of certain aspects of our decision. For one, Guardian challenged our 2013 determination of the scope of the real property to be valued, arguing that we erred in determining that various tanks at the subject property were real property. *See Guardian*, 868 N.W.2d at 258. Guardian also challenged our findings with respect to obsolescence. *Id.* at 262. But Guardian did not argue that we had erred in rejecting the approach to economic obsolescence taken by its experts, the Shenehon firm. To the contrary, Guardian argued that because we had placed so little reliance on Shenehon's opinion, we should have concluded that Guardian entirely failed to overcome the prima facie validity of the assessments.⁹

⁹ The supreme court dismissed this argument, noting (among other things) that Guardian itself had "presented sufficient evidence to overcome the presumption of prima facie validity afforded to the assessor's estimated market value for the subject property, even if that evidence was insufficient for purposes of valuation." *Guardian*, 868 N.W.2d at 258 n.6.

Id. at 258 n.6. Finally, Guardian argued that we erred in adopting a method of calculating obsolescence “that was not supported by the appraisal testimony in the record.” *Id.* at 261.

4. The Minnesota Supreme Court’s 2014 decision on obsolescence

The Minnesota Supreme Court affirmed our 2013 determinations as to the scope of the real property to be valued. *Id.* at 258-61. The court also called our findings with respect to replacement cost (new) “supported by the evidence in the record.” *Id.* at 262. But the court rejected our conclusions as to external obsolescence as “not reasonably supported by the record as a whole.” *Id.* at 266. In particular, the court concluded that we “failed to explain adequately why [we] selected the particular measure of external obsolescence [we] used—applying capacity alone as a proxy for external obsolescence—and whether such a methodology is an accepted approach.” *Id.*

The court therefore vacated our decision in part and remanded the matter for further proceedings. The court declined to “mandate a particular methodology to apply on remand.” *Id.* at 267. Moreover, the court specifically declined to “endorse either party’s obsolescence calculation,” agreeing with us that Guardian “did not adequately connect industrywide trends to the value of the subject property.” *Id.* Finally, the court specifically declined to “foreclose the possibility that [we] could properly adopt a methodology that is different from those advanced by either party, if [we] adequately explain[] [our] reasoning and if the evidence as a whole supports the alternative methodology.” *Id.*

5. Proceedings on remand

On remand, we invited input from the parties, both on the question of whether to reopen the record for additional evidence or briefing and on “the particular evidence . . . or briefing to be offered.”¹⁰ Guardian asked that we reopen the record for additional briefing and for “clarifying

¹⁰ Order (Sept. 28, 2015).

and corroborating appraisal testimony addressing highly critical issues upon which the Court was not previously persuaded by either parties' experts.”¹¹ Guardian proposed to “focus[]” the hearing “upon this Court’s reservations and the reasons for rejecting both parties’ expert opinions of external obsolescence and their supporting market information.”¹² For its part, the County urged “a prompt and relatively inexpensive” proceeding with only “an initial brief and a reply brief, both of limited lengths,” and no additional testimony.¹³ The County argued that our record already included “a wealth of industry data for the years at issue . . . sufficient to allow the court to make whatever changes it deems appropriate.”¹⁴ As the County put it: “There is no need to reopen the trial record to gain data from 2008-2011, when so much of the industry data from that time period is already in the record.”¹⁵

After consideration, we declined Guardian’s request for a further evidentiary hearing, particularly because the proposed hearing appeared limited to the proffer of expert testimony (primarily, if not exclusively) bolstering the opinions of Guardian’s appraisers already in the record, and which Guardian itself had abandoned on appeal. *See Guardian*, 868 N.W.2d at 258 n.6. In March 2016 we invited the parties to file supplemental briefs limited to the issue of obsolescence.¹⁶ The parties filed initial and responsive briefs in June 2016 and the matter was deemed submitted as of June 29, 2016.

¹¹ Pet’r’s Letter Br. 2 (Dec. 4, 2015).

¹² Pet’r’s Letter Br. 2 (Dec. 4, 2015).

¹³ Resp’t’s Letter Br. 3 (Dec. 4, 2015).

¹⁴ Resp’t’s Letter Br. 3 (Dec. 4, 2015).

¹⁵ Resp’t’s Letter Br. 3 (Dec. 4, 2015).

¹⁶ Order (Mar. 21, 2016). Our order instructed the parties to serve and file certain additional materials. In particular, we instructed the County to file copies of documents consulted by its

(a) September 2016 findings of fact on obsolescence

In September 2016, we filed findings of fact and conclusions of law concerning obsolescence and an order for judgment. *Guardian*, 2016 WL 5874449. Again applying the *Eurofresh* framework, we concluded, for a variety of reasons, that Guardian failed to prove any of its asserted causes of economic obsolescence as of any of the valuation dates at issue. *Id.* at *1. We nevertheless found that the subject property had not generated the market-required rate of return during 2010, and adopted that approach as our determination of obsolescence. *Id.*; see Robert F. Reilly, *Economic Obsolescence in the Property Tax Valuation of Industrial or Commercial Properties*, J. Multistate Tax'n & Incentives 20, 27 (Aug. 2007).

(b) The County's motion for amended findings

On October 13, 2016, the County timely filed a motion for correction of computational errors and for amendment of our associated findings of fact.¹⁷ The County asserted the existence of a computational error in our 2014 findings with respect to the replacement cost (new) of the subject property as of January 2, 2010, and January 2, 2011. In particular, the County asserted that we had mistakenly failed to increase our figures for replacement cost (new) as of January 2010

expert concerning the purchase by Valero Energy of certain ethanol facilities from the bankruptcy estate of VeraSun. Order 3 (Mar. 21, 2016). Although all of the documents subsequently filed by the County with the court are publicly available documents of which we could take judicial notice under Minn. R. Evid. 201, we have not considered them.

We also instructed petitioner Guardian to compare Exhibit 28 to the United States Department of Agriculture document it purported to be, and to file an amended version of the exhibit if necessary. Order 3. Except as discussed below, we have not consulted or considered Guardian's revised exhibit.

¹⁷ Waseca Cty.'s Post-Remand Not. Mot. & Mot. Correction Computational Errors (filed Oct. 13, 2016).

and 2011 for indirect costs and entrepreneurial profits, as we had done as of January 2, 2009.¹⁸ Guardian opposed the County's motion, asserting that during Guardian's appeal of our 2014 decision, the County had expressly waived its right to request correction of the error.¹⁹ In addition, the County sought correction of an apparent error in our September 2016 findings. The County noted that, although we concluded that the subject property suffered from no economic obsolescence as of January 2, 2011, the market value to which we concluded was \$437,300 lower than the market value for the same date in our 2014 findings.²⁰

6. *MERC and Menard*: the Minnesota Supreme Court addresses obsolescence

While the County's motion was before us, the Minnesota Supreme Court issued two decisions on economic obsolescence. In one, the supreme court ruled that *Eurofresh*, the case on which we had relied for Guardian's burden of proof,²¹ applied the wrong legal standard with respect to economic obsolescence in Minnesota. *Minn. Energy Res. Corp. (MERC) v. Comm'r of Revenue*, 886 N.W.2d 786 (Minn. 2016). In *MERC*, the taxpayer attempted to prove the effect of economic obsolescence on the value of its natural-gas pipeline distribution system in two ways: (1) by showing that MERC's return on equity "was significantly lower than average for the gas distribution industry"; and (2) by showing that MERC (a regulated utility) failed to earn its authorized return on equity. *Minn. Energy Res. Corp. v. Comm'r of Revenue*, No. 8041 et al., 2014 WL 4953754, at *16-18 (Minn. T.C. Sept. 29, 2014). But, as in *Guardian* and in *American Crystal*

¹⁸ Waseca Cty.'s Mem. Supp. Mot. Correction Computational Errors 5 (filed Oct. 13, 2016).

¹⁹ Guardian's Mem. Opp'n Waseca Cty.'s Mot. Correction Computational Errors 1 (filed Oct. 20, 2016).

²⁰ Waseca Cty.'s Mem. Supp. Mot. Correction Computational Errors 8 n.3.

²¹ See *Guardian*, 2014 WL 7476215, at *42.

Sugar before that, we required the taxpayer to further show the cause(s) of obsolescence and that such cause(s) actually affected the subject property. *Id.* at *16. In response, “MERC alleged numerous factors as possible causes of its external obsolescence, including regulation and rate lags, mild weather, the economic crisis in 2008, and an increase in use of energy efficient appliances.” *Id.* at *17. We concluded, however, that MERC “failed to demonstrate that any of these factors affected the subject property.” *Id.* Accordingly, we made no reduction for economic obsolescence. *Id.* at *18.²²

On appeal, the supreme court reversed. *MERC*, 886 N.W.2d at 799. The court observed first that in an earlier case, we had found 50 percent external obsolescence based on “no more” than the fact that “a health club received an actual rate of return that was half as large as its expected rate of return.” *Id.* at 798 (citing *Nw. Racquet Swim & Health Clubs, Inc. v. Cty. of Dakota*, 557 N.W.2d 582, 586 (Minn. 1997)).²³ Similarly, the court noted, in another case it had found a property’s “financial losses” at least “probative evidence of external obsolescence.” *Id.* (citing *Am. Express Fin. Advisors, Inc. v. Cty. of Carver*, 573 N.W.2d 651, 660 (Minn. 1998)). The supreme court therefore declined to require MERC to “show a specific causal nexus between the asserted cause of the obsolescence and the subject property,” or to “precisely calculate the contribution of each [specific cause] to decreased revenues or profit margins.” *Id.* at 798. At the very least, the court held, a showing that MERC’s returns on equity were less than those of similar companies “was [] sufficient to make out a prima facie case of external obsolescence.” *Id.* at 799.

²² Because we concluded that MERC had not met the first part of its burden, we had no need to address the Commissioner’s argument “that MERC must quantify the amount of economic obsolescence attributable to each alleged factor.” *MERC*, 2014 WL 4953754, at *17 n.227.

²³ The supreme court called this method “[d]irect comparison of similar properties with and without external obsolescence.” *MERC*, 886 N.W.2d at 799 (quoting *The Appraisal Institute, Appraisal of Real Estate* 634 (14th ed.)).

On the same day, however, the supreme court affirmed our determination that a different taxpayer had failed to meet its burden with respect to economic obsolescence. *Menard, Inc. v. Cty. of Clay*, 886 N.W.2d 804 (Minn. 2016). In *Menard*, the taxpayer's expert appraiser based his opinion of economic obsolescence "exclusively on broad generalizations and on national rather than local data." *Menard, Inc. v. Cty. of Clay*, No. 14-CV-12-1500 et al., 2015 WL 5944893, at *16 (Minn. T.C. Sept. 18, 2015).

For example, [the expert] attributed external obsolescence at the subject property "to the ongoing recession and to its adverse and significant impact on all segments of the real estate market" and he commented that "the increased vacancy rates, the decreased lease rates, and the lower market values likely will demonstrate a very slow and moderate recovery to return to prerecession levels." [The expert], however, presented no data indicating that the recession had produced lower property values in the Fargo/Moorhead real estate market in particular, and no studies documenting either increased local vacancy rates or decreased local lease rates.

Id. The supreme court concluded that our "finding that the subject property suffered no external obsolescence was not clearly erroneous." *Menard*, 886 N.W.2d at 816.

7. Guardian appeals our September 2016 decision on obsolescence

Before we had addressed, or requested input from the parties on, the effect of the *MERC* and *Menard* decisions on our September 2016 findings, Guardian appealed our September 2016 findings by certiorari. *Guardian Energy, LLC v. Cty. of Waseca*, No. A16-1850 (filed Nov. 21, 2016). The County filed a notice of related appeal, seeking review of our September 2016 order and "all other orders of the Tax Court affecting the final determination of market value."²⁴ Guardian moved to dismiss the County's related appeal, asserting that the issues the County sought to raise were either waived or were beyond the scope of remand before this

²⁴ Not. Related Appeal (filed Dec. 2, 2016).

court.²⁵ Accordingly, we did not address the County’s motion for amended findings and did not enter final judgment in the matter. *See* Minn. R. Civ. App. P. 108.01, subd. 2.

8. The Minnesota Supreme Court stays proceedings on appeal

The supreme court stayed further proceedings in Guardian’s appeal “pending entry of final judgment by the Minnesota Tax Court.” *Guardian*, A16-1850, Order (Dec. 28, 2016). The court noted that it could not “resolve Guardian Energy’s motion [to dismiss the County’s notice of related appeal] or determine whether the County has waived arguments on appeal or raised issues on appeal that are beyond the scope of the remand until the tax court resolves the post-trial motion that is still before it.” *Id.*

9. Further proceedings at this court: the County’s motion for amended findings and the effect of *MERC*

In January 2017, we invited the parties to serve and file memoranda “as to the effect of the supreme court’s decision in *MERC* on this court’s September 28 findings of fact and conclusions of law concerning obsolescence.”²⁶ Rather than a memorandum addressing the effect of *MERC*, the court received a letter from Guardian “respectfully request[ing] that this Court reconsider its issuance of the Order for Briefing because there is no motion pending before this Court relative to external obsolescence, generally, or the recent *MERC* decision regarding the *Eurofresh* standard, specifically.”²⁷ Guardian asserted that because its appeal was pending before the supreme court,

²⁵ Relator’s Mot. Orders (1) Dismiss Resp’t’s Not. Related Appeal (2) Declare Issue Raised Resp’t’s Statement Case Untimely, Waived, Beyond Scope Review (filed Dec. 8, 2016).

²⁶ Order (Jan. 4, 2017).

²⁷ Letter from Masha M. Yevzelman to Hon. Joanne H. Turner (Jan. 10, 2017) (on file with the Minnesota Tax Court).

“this Court lacks jurisdiction to substantively modify the September 28 Order with respect to external obsolescence.”²⁸

In response, the County argued that because we had neither issued a final order nor entered judgment with respect to our September 2016 findings, “the Minnesota Supreme Court simply is without jurisdiction at this time to review the September 28 Order.”²⁹ The County continued:

As a practical matter, it would be a waste of the parties’ time and effort to file briefs with the Minnesota Supreme Court concerning the September 28 Order, if the decision in *MERC* actually has some effect on the valuation of Guardian’s taxable real property. . . . If *MERC* makes a difference in the valuation analysis, the valuation should be determined with finality in the trial court before any additional appellate activity occurs.³⁰

10. Guardian’s request for “clarification” of our jurisdiction on remand is denied

On January 23, 2017, before we had responded to the parties’ correspondence, Guardian filed a motion with the Minnesota Supreme Court seeking “an Order clarifying that the Minnesota Tax Court does not have jurisdiction to issue any order that would substantively affect [our September 2016 decision on obsolescence]” and requiring us to “rescind” the order for briefing on the effect of *MERC*.³¹ Guardian again asserted that the County’s motion was not one for amended findings, and that the County’s explicit reference to rule 52.02 in the motion was “inaccurate[.]”³²

²⁸ Letter from Masha M. Yevzelman to Hon. Joanne H. Turner (Jan. 10, 2017) (on file with the Minnesota Tax Court).

²⁹ Letter from Marc J Manderscheid to Hon. Joanne H. Turner (Jan. 11, 2017) (on file with the Minnesota Tax Court).

³⁰ Letter from Marc J Manderscheid to Hon. Joanne H. Turner (Jan. 11, 2017) (on file with the Minnesota Tax Court).

³¹ Relator’s Mot. Order Clarifying Jurisdiction Minnesota Tax Court 7 (filed Jan. 23, 2017).

³² Relator’s Mot. Order Clarifying Jurisdiction Minnesota Tax Court 6.

The County filed its opposition to Guardian's motion on January 25, 2017.³³ The supreme court denied Guardian's motion and left in place its stay of the proceedings on appeal. *Guardian Energy, LLC v. Cty. of Waseca*, A16-1850, Order (Feb. 1, 2017).

11. Further proceedings on remand: briefing and oral argument

On February 3, 2017, the parties filed memoranda with our court addressing the effect of the supreme court's decision in *MERC* on our September 2016 order concerning obsolescence. We held oral argument on the County's motion for amended findings, and on the effect of *MERC*, on February 16, 2017.

B. THE SCOPE OF REMAND

Before proceeding, we address the scope of remand. Although the supreme court nominally vacated our 2014 valuations of the subject property, the issue before us on remand is whether the subject property suffered from external obsolescence as of any of the valuation dates and, if so, the amount of such obsolescence. *Guardian*, 868 N.W.2d at 256, 267. Our February 2013 findings of fact with respect to the items of real property to be valued, and our December 2014 findings of fact with respect to the replacement cost (new) of the subject property, either were not appealed or were affirmed by the supreme court and thus became law of the case. *See Brezinka v. Bystrom Bros., Inc.*, 403 N.W.2d 841, 843 (Minn. 1987).

The supreme court concluded that our 2014 findings with respect to external obsolescence were "not reasonably supported by the record as a whole." *Guardian*, 868 N.W.2d at 266. Specifically, the court concluded that we "failed to adequately explain why [we] selected the particular measure of external obsolescence [we] used . . . and whether such a methodology is an

³³ Waseca Cty.'s Mem. Opp'n Guardian's Mot. "Clarifying Jurisdiction" (filed Jan. 25, 2017).

accepted approach” to the calculation of obsolescence. *Id.* In addition, the court observed, we “rejected entirely the decline in ethanol profit margins that both parties’ appraisers found to be a primary consideration in determining external obsolescence.” *Id.*; see *Eden Prairie Mall, LLC v. Cty. of Hennepin*, 797 N.W.2d 186, 194 (Minn. 2011) (observing that “[w]hen the tax court concludes that the market value of a subject property is lower or higher than the appraisal testimony, it should carefully explain its reasoning for rejecting the appraisal testimony . . . and adequately describe the factual support in the record for its determination”).

But the court “acknowledge[d] the complex and unique valuation challenges in calculating external obsolescence.” *Guardian*, 868 N.W.2d at 267. As a result, the court declined to “mandate a particular methodology to apply on remand.” *Id.* Nor did the court “endorse either party’s obsolescence calculation” or “foreclose the possibility that [this court] could properly adopt a methodology that is different from those advanced by either party,” provided that we adequately explain our reasoning and “the evidence as a whole supports the alternative methodology.” *Id.*

The supreme court’s language is not entirely clear, however. Although the court declined to “mandate a particular methodology to apply on remand,” for example, the court also characterized the record before us as “devoid of expert-appraisal support” for our approach to obsolescence. *Id.* at 267. Similarly, the court expressly authorized us to “adopt a methodology that is different from those advanced by either party,” but elsewhere complained that we had “rejected entirely” a decline in ethanol profit margins it said had been cited by both experts. *Id.* at 266.

Guardian seizes on those apparent inconsistencies to argue that, on remand, we are limited in our approach to economic obsolescence to one of the methods employed by the parties’ experts. For example, Guardian characterizes the supreme court’s instructions on remand thusly:

In remanding the above-captioned matter, the Minnesota Supreme Court instructed that the methodology that this Court selects for calculating external obsolescence must *not only* be “adequately explain[ed]” *but also must be* supported by “the evidence as a whole,” including the “expert-appraisal support” in the record.³⁴

Guardian takes a stab at reconciling the differences, calling some of the supreme court’s inconsistent language a “clarification”:

[A]s the Minnesota Supreme Court clarified in the conclusion of its opinion, the record must contain “expert-appraisal support” demonstrating that the method selected by the Tax Court to calculate obsolescence is appropriate.³⁵

Ultimately, Guardian picks and chooses from the language of the supreme court’s decision to construct a firm mandate:

Therefore, in accordance with the Minnesota Supreme Court’s instructions on remand, the method that this Court chooses for its external obsolescence estimate should be based on the record evidence and expert-appraisal testimony that was before this Court during trial and before the Minnesota Supreme Court on appeal. . . . [T]he uncontroverted expert-appraisal testimony and evidence in the record supports primary reliance on industry-wide declining profit margins in measuring external obsolescence.³⁶

We must execute the supreme court’s mandate strictly according to its terms. *Halverson v. Vill. of Deerwood*, 322 N.W.2d 761, 766 (Minn. 1982). In the absence of express directions, however, we are free to proceed in any manner not inconsistent with the supreme court’s opinion. *John Wright & Assocs., Inc. v. City of Red Wing*, 256 Minn. 101, 102, 97 N.W.2d 432, 434 (1959).

Here, contrary to Guardian’s arguments, the supreme court gave no express direction on remand: it did not “mandate a particular methodology to apply on remand,” did not “endorse either party’s obsolescence calculation,” and did not “foreclose the possibility that [we] could properly

³⁴ Pet’r’s Suppl. Br. Regarding Economic Obsolescence 3 (filed June 21, 2016).

³⁵ Pet’r’s Suppl. Br. Regarding Economic Obsolescence 4.

³⁶ Pet’r’s Suppl. Br. Regarding Economic Obsolescence 5.

adopt a methodology that is different from those advanced by either party.” *Guardian*, 868 N.W.2d at 259. Nor did the supreme court require us to place “primary reliance on industry-wide declining profit margins”—a method that, as we will explain, is contrary to the supreme court’s decisions in *MERC* and *Menard*. All the supreme court requires of us on remand is that we “adequately explain [our] reasoning,” and if we “adopt a methodology that is different from those advanced by either party,” that “the evidence as a whole supports the alternative methodology.” *Id.*

C. BURDEN OF PROOF

The assessor’s estimated market value is prima facie valid. *S. Minn. Beet Sugar Coop*, 737 N.W.2d at 557-60. The petitioner may overcome the presumption of prima facie validity by introducing credible evidence showing that the assessed value “does not reflect the true market value of the property.” *Gale v. Cty. of Hennepin*, 609 N.W.2d 887, 890 (Minn. 2000). The taxpayer might meet this burden, for example, by “presenting evidence of truly comparable sales that the county had not considered or showing that the county taxed property that is not taxable.” *S. Minn. Beet Sugar Coop*, 737 N.W.2d at 559-60. In this case, Waseca County conceded the validity of the assessment.³⁷

If the presumption of validity is overcome, we determine the market value of the subject property based upon a preponderance of the evidence. *Macy’s Retail Holdings, Inc. v. Cty. of Hennepin*, No. 27-CV-07-0774 et al., 2011 WL 6117899, at *2 (Minn. T.C. Nov. 28, 2011). The taxpayer bears the burden to show the market value of the subject property. *Stronge & Lightner Co. v. Comm’r of Taxation*, 228 Minn. 182, 195-96, 36 N.W.2d 800, 807 (1949). In this case, that

³⁷ Tr. 51-55 (counsel for Waseca County indicating that because certain items at the Janesville facility were not assessed, the County conceded the assessed value as of each valuation date was not accurate).

includes the burden to show the amount, if any, of obsolescence affecting market value as of any of the valuation dates at issue.

D. WASECA COUNTY'S MOTION FOR AMENDED FINDINGS

We begin by considering Waseca County's motion for amended findings.³⁸ Waseca County seeks first to correct an acknowledged computational error in our September 2014 findings of fact. In particular, the County asks us to correct a clerical error in our calculation of the 2010 and 2011 replacement cost (new) of the improvements to the real property to reflect indirect costs and entrepreneurial profits.³⁹ Our September 2016 findings of fact and conclusions of law concerning obsolescence acknowledged the error but concluded that the County had waived the issue on appeal. *Guardian*, 2016 WL 5874449, at *6 n.13.

Second, Waseca County seeks amended findings of fact to correct an apparent and *different* clerical error in our September 2016 findings of fact and conclusions of law. In particular, in 2014 we concluded the subject property suffered from no external obsolescence as of January 2, 2011, and found the market value of the property was \$38,593,000. *Guardian*, 2014 WL 7476215, at *45. On remand, the County notes, we also concluded the subject property suffered from no external obsolescence as of January 2, 2011, but our market value for the property is \$437,300 less than the 2014 figure.⁴⁰

³⁸ To the Minnesota Supreme Court, *Guardian* argued that the County's motion "was not a motion for rehearing, or a motion for amended findings of fact, conclusions of law, or a new trial." Relator's Br. 6. To the contrary, the County's motion on its face cites Minn. R. Civ. P. 52. Waseca Cty.'s Post-Remand Not. Mot. & Mot. Correction Computational Errors 1 ("The motion is brought pursuant to Minn. R. Civ. P. 60.01, Minn. R. Civ. P. 52.02, and Minn. Stat. § 271.08, subd. 1."). At oral argument on the County's motion, *Guardian* acknowledged that this court cannot grant any portion of the motion without amending its findings of fact. Tr. 11-12 (Feb. 16, 2017).

³⁹ Waseca Cty.'s Mem. Supp. Mot. Correction Computational Errors 2-3.

⁴⁰ Waseca Cty.'s Mem. Supp. Mot. Correction Computational Errors 8 n.3.

Guardian opposes the County's motion on several grounds. We address each in turn.

1. No hearing on the motion

Guardian first contends that we must deny the motion because the County did not request a hearing on it.⁴¹ The tax court is subject to the Minnesota Rules of Civil Procedure "where practicable." Minn. Stat. § 271.06, subd. 7 (2016). Rule 52.02, Minn. R. Civ. P., allows the trial court to amend its findings or make additional findings "[u]pon motion of a party served and heard not later than the time allowed for a motion for new trial." Nothing in rule 52.02 prevents a party from waiving a hearing on its motion.

Guardian cites Minn. R. 8610.0070, subp. 4 (2015), which provides:

A hearing date and time must be obtained from the tax court administrator. A party obtaining a date and time for a hearing on a motion or for any other calendar setting, shall promptly give notice advising all other parties who have appeared in the action so that cross motions may, insofar as possible, be heard on a single hearing date. The notice to the other parties must contain a statement describing the nature of the motion and relief sought.⁴²

However, rule 8610.0070, by its terms, applies to pretrial motion practice, and is silent with respect to its applicability to motions made during trial and after. *See* Minn. R. 8610.0070, subp. 1 (2015). Nothing in rule 8610.0070 prevents a party to our proceedings from waiving oral argument on a post-trial motion.⁴³

⁴¹ Guardian's Mem. Opposition Waseca Cty.'s Mot. Correction Computational Errors 6.

⁴² Guardian's Mem. Opp'n Waseca Cty.'s Mot. Correction Computational Errors 6.

⁴³ Even if rule 8610.0070 were applicable to post-trial motions (a question we do not address), the County filed and served a notice of motion and motion that "described the nature of the motion and relief sought," but specifically waived oral argument on its motion. *See* Waseca Cty.'s Post-Remand Not. Mot. & Mot. Correction Computational Errors 1. Beyond notice of the nature of the motion and the relief sought, the purpose of notice of the date and time of the hearing is "so that cross motions may, insofar as possible, be heard on a single hearing date." Minn. R. 8610.0070, subp. 4. Guardian was not prejudiced by the lack of a hearing on the County's motion: it did not

2. Beyond the scope of remand

Guardian also contends that we must deny the County's motion because it is beyond the scope of remand. According to Guardian, the supreme court "limited the scope of remand to the issue of what methodology should be applied to calculate external obsolescence suffered by the subject property," and our 2014 values for replacement cost (new) "cannot be disturbed or revised on remand."⁴⁴ The County responds that under Minn. R. Civ. P. 60.01, clerical errors "may be corrected by the court at any time," even on remand.⁴⁵ Guardian counters that under rule 60.01, we cannot "alter or amend anything expressly or implicitly ruled on" by the supreme court, and the supreme court's 2015 decision "expressly affirmed" our 2014 values for replacement cost (new).⁴⁶ The County responds that the supreme court concluded only that our values for replacement cost (new) for the subject property were "supported by the evidence in the record," language the County argues falls short of specifically affirming our calculations.⁴⁷

file or serve a post-trial motion of its own, and it served and filed written opposition to the County's motion.

⁴⁴ Guardian's Mem. Opp'n Waseca Cty.'s Mot. Correction Computational Errors 5.

⁴⁵ Waseca Cty.'s Mem. Supp. Mot. Correction Computational Errors 7 (citing *Hartis v. Chi. Title Ins. Co.*, 694 F.3d 935, 950 (8th Cir. 2012)). Rule 60.01, Minn. R. Civ. P., provides:

Clerical mistakes in judgments, orders, or other parts of the record and errors therein arising from oversight or omission may be corrected by the court at any time upon its own initiative or on the motion of any party and after such notice, if any, as the court orders. During the pendency of an appeal, such mistakes may be so corrected with leave of the appellate court.

⁴⁶ Guardian's Mem. Opp'n Waseca Cty.'s Mot. Correction Computational Errors 5-6 (quoting *Hartis*, 694 F.3d at 950).

⁴⁷ Waseca Cty.'s Mem. Supp. Mot. Correction Computational Errors 3.

The question is therefore whether the supreme court “expressly or implicitly ruled on” our 2014 determinations of replacement cost (new). Guardian did not seek review of our determination of replacement cost (new),⁴⁸ nor did the County. The County nevertheless argued that our “market value conclusions are supported by substantial evidence in the record.”⁴⁹ In apparent response, the supreme court called our calculations of replacement cost (new) “supported by the evidence in the record.” *Guardian*, 868 N.W.2d at 262; *see* Minn. Stat. § 271.10, subd. 1 (2016) (“[R]eview [of a final order of the tax court] may be had on the ground that the Tax Court was without jurisdiction, that the order of the Tax Court was not justified by the evidence or was not in conformity with law, or that the Tax Court committed any other error of law.”). We conclude that the supreme court at least implicitly, if not explicitly, affirmed our values for replacement cost (new) for the subject property.

3. Waiver

Finally, Guardian contends that we must deny the County’s motion because the County waived the error on appeal. Guardian notes that the County expressly asked the supreme court to affirm our “conclusions as to the market values of the Subject Property for each year of valuation.”⁵⁰ In addition, Guardian points to the following footnote in the County’s February 2015 brief to the Minnesota Supreme Court:

In preparing this Memoranda, the County has become aware that there is a mathematical calculation error in the Court’s conclusions of market values for both January 2, 2010 and January 2, 2011. The Tax Court added six percent to the RCN

⁴⁸ *See* Br. Relator Guardian Energy, LLC 1-4, Nos. A14-1883 & A14-2168 (filed Jan. 22, 2015) (listing issues raised on appeal).

⁴⁹ Br. Resp’t Cty. Waseca 10, Nos. A14-1883 & A14-2168 (filed Feb. 23, 2015); *see also id.* at 12 (arguing that this court “appropriately developed an estimate of replacement cost”).

⁵⁰ Br. Resp’t Cty. Waseca 34, Nos. A14-1883 & A14-2168 (filed Feb. 23, 2015), cited by Guardian’s Mem. Opp’n Waseca Cty.’s Mot. Correction Computational Errors 3.

for indirect costs and profits in its 2009 calculations. Such costs would presumably also be added [to] the RCN's for 2010 and 2011. In reviewing the Tax Court's calculations, however, it appears that the six percent indirect costs and profits figure was not added for each of the latter two years, thus understating the overall RCN for 2010 by approximately \$2.2 million and by approximately \$2.35 million for 2011. Neither party raised this issue on a motion for amended findings. The County did not file a notice of related appeal. *The County asks that the market values in the Court's December 9, 2014 Order be affirmed for all years.*⁵¹

The County denies that it waived correction of the error. According to the County, its footnote "merely stated the facts," and its request that the supreme court affirm our conclusions as to market value indicated only that "the County desired that the Supreme Court should bring these lawsuits to an end" by affirming our order.⁵² Indeed, the County contends, the footnote in its brief "shows that the County did *not* intend to waive any calculation errors *for so long as the litigation continued.*"⁵³ Had it intended to waive the error, the County argues, "it could have simply not advised the Supreme Court" of the issue.⁵⁴ And, the County continues, "[e]ven if there was some sort of waiver, it was a waiver conditioned upon the conclusion of the litigation."⁵⁵

Waiver is "the intentional relinquishment of a known legal right." *Valspar Refinish, Inc. v. Gaylord's, Inc.*, 764 N.W.2d 359, 367 (Minn. 2009) (internal quotation omitted). In this case, the County did not move for correction of the error as part of its September 22, 2014 motion for

⁵¹ Br. Resp't Cty. Waseca 34-35 n.10 (emphasis added) (citation omitted), Nos. A14-1883 & A14-2168, cited by Guardian's Mem. Opp'n Waseca Cty.'s Mot. Correction Computational Errors 3.

⁵² Waseca Cty.'s Mem. Supp. Mot. Correction Computational Errors 6.

⁵³ Waseca Cty.'s Mem. Supp. Mot. Correction Computational Errors 7 (emphasis added).

⁵⁴ Waseca Cty.'s Mem. Supp. Mot. Correction Computational Errors 7.

⁵⁵ Waseca Cty.'s Mem. Supp. Mot. Correction Computational Errors 7.

amended findings.⁵⁶ Even if the County had discovered the error only on appeal, it did not seek a stay of the proceedings before the supreme court, as rule 60.01 permits, to request that we correct it. The County's failure to do so was "the intentional relinquishment of a known legal right," amounting to a waiver. We therefore decline to grant the County's motion with respect to 2010 and 2011 indirect costs and entrepreneurial profit.

4. Motion to amend September 2016 findings

In addition, the County seeks to correct an apparent computational error in our September 2016 findings of fact. In particular, the County notes that although we concluded in 2016 there was no external obsolescence as of January 2, 2011, the market value of the subject property in our 2016 findings is \$437,300 less than our 2014 findings.⁵⁷ Upon review, we have determined that our 2014 findings erroneously failed to account for depreciation of site improvements such as the rail siding, asphalt paving, and fence. Total depreciation with respect to those site improvements as of January 2, 2011, totaled \$437,240. In other words, our 2014 findings (but not our 2016 findings) understated physical depreciation (and thereby overstated the market value) of the subject property as of January 2, 2011, by \$437,240.

Unlike the error in our 2014 findings with respect to indirect costs and entrepreneurial profits, there is no evidence that either party was aware of the error in depreciation during the time for making post-trial motions or during the 2014 appeal. We cannot conclude that either party waived correction of the error. Moreover, on appeal the Minnesota Supreme Court affirmed our 2014 calculations of replacement cost (new), *see Guardian*, 868 N.W.2d at 262, but not our

⁵⁶ See Waseca Cty.'s Mem. Supp. Post-Trial Mot. Am. Findings Fact Conclusions Law (filed Sept. 22, 2014).

⁵⁷ Waseca Cty.'s Mem. Supp. Mot. Concerning Computational Errors 8 n.3.

calculations of physical depreciation (from which neither party appealed). We therefore nominally amend our 2014 findings of fact to correct the oversight, noting again that there is no corresponding error in our 2016 findings. *See* Minn. R. Civ. P. 60.01 (allowing the court to correct “[c]lerical mistakes . . . arising from oversight or omission . . . at any time”).

e. Amended findings with respect to economic obsolescence

On a motion for amended findings of fact, we “review *all* of the evidence and *all* of [our] findings,” amending them in a manner either favorable or unfavorable to the moving party. *McCauley v. Michael*, 256 N.W.2d 491, 500 (Minn. 1977) (emphasis added). We therefore review our September 2016 findings of fact with respect to economic obsolescence and amend them to reflect an intervening change in applicable law.

As we have explained, during the appeal of our 2014 decision on valuation, neither party challenged our application of *Eurofresh* to this property. *Guardian*, 868 N.W.2d at 264. The Minnesota Supreme Court’s 2015 decision remanding the matter to our court for further proceedings assumed, without deciding, that *Eurofresh* was “the appropriate analytical framework” for obsolescence. *Id.* On remand, our September 2016 findings with respect to obsolescence therefore again applied the *Eurofresh* framework. *Guardian*, 2016 WL 5874449, at *7-8.

On November 9, 2016—after our September 2016 findings were filed—the Minnesota Supreme Court held in a different case that we had erred in applying the *Eurofresh* standard to that taxpayer’s claims of economic obsolescence. *MERC*, 886 N.W.2d at 798-99 (abrogating both our decision in this case and the case on which it relied, *Am. Crystal Sugar Co. v. Cty. of Polk*, Nos. C1-05-574 & C4-06-367, 2009 WL 2431376 (Minn. T.C. Aug. 5, 2009)).

“[W]here an appellate court has passed on a legal question and remanded to the court below for further proceedings,” the appellate court’s decision is ordinarily “law of the case,” meaning it

“will not be re-examined on a second appeal of the same case.” *Brezinka*, 403 N.W.2d at 843. But, the supreme court has held, “the doctrine of law of the case should not apply where, in the interval between two appeals of a case, there has been a change in the law by legislative action or by a judicial ruling entitled to deference.” *Id.*⁵⁸ In this case, the supreme court’s decision in *MERC*—“a judicial ruling entitled to deference”—worked such a change in the law.

Accordingly, on January 4, 2017, we invited the parties to brief the effect of the supreme court’s decision in *MERC* on our September 2016 findings of fact and conclusions of law. Guardian argued that this court “should not have applied the *Eurofresh* standard when evaluating the parties’ experts’ external obsolescence estimates.”⁵⁹ According to Guardian, this court

erroneously analyze[d] each individual potential causal factor and sub-factor for external obsolescence (e.g. overcapacity, lower demand, high corn prices, high ethanol supplies), rather than focusing on the highly consistent expert appraisal evidence in the record that analyzed the integrated consequences of the individual factors as reflecting in ‘prevailing industry conditions’ resulting in industrywide declining profit margins.⁶⁰

⁵⁸ In *Brezinka*, a workers’ compensation dispute, the Workers’ Compensation Court of Appeals reversed the compensation judge’s calculation of dependency benefits and remanded the matter with instructions to recompute the benefits. 403 N.W.2d at 842. While *Brezinka* was pending before the compensation judge, the Minnesota Supreme Court ruled on the issue in a manner contrary to the Workers’ Compensation Court of Appeals. *Id.* at 842-43. As the supreme court would later put it, “the compensation judge had to decide whether to follow the [Workers’ Compensation Court of Appeals] mandate or the supreme court’s holding.” *Id.* at 843. The compensation judge elected to follow the supreme court’s holding. *Id.* The Workers’ Compensation Court of Appeals reversed the compensation judge for not having followed its mandate. *Id.* But on subsequent appeal, the Minnesota Supreme Court reversed, reinstating the compensation judge’s decision. *Id.*

⁵⁹ Guardian’s Mem. Regarding Effect *MERC* 2 (filed Feb. 3, 2017).

⁶⁰ Guardian’s Mem. Regarding Effect *MERC* 6.

This analysis, according to Guardian, led us to err in “seeking a precise mathematical calculation of the contribution of each factor on Guardian’s ethanol plant.”⁶¹

For its part, the County argued that we could apply neither Shenehon’s approach during trial (nor a different approach suggested by Guardian after trial) because neither were based on the trial record.⁶² The County recounted Guardian’s “vigorous[] attack[]” of Mr. Dodd’s external obsolescence analysis and this court’s agreements with those criticisms.⁶³ The County advocated instead for this court’s adoption of the “inutility” approach to obsolescence, which the County considered the supreme court to have “strongly” suggested in its 2015 decision.⁶⁴ In particular, the County urged the court to “conclude that the ratio of closed to operational plants is a strong indicator of any external obsolescence at the Subject Property.”⁶⁵ But, the County emphasized, “[t]he importance of *MERC* to the Court’s task at hand is not limited to *Eurofresh*; rather, *MERC* instructs the Court to ground its analysis in the record evidence and apply its credibility

⁶¹ Guardian’s Mem. Regarding Effect *MERC* 9.

⁶² Waseca Cty.’s Mem. Concerning Effect *MERC* 6-8 (filed Feb. 6, 2017).

⁶³ Waseca Cty.’s Mem. Concerning Effect *MERC* 9.

⁶⁴ Waseca Cty.’s Mem. Concerning Effect *MERC* 11. In its 2015 decision, the supreme court said this:

Perhaps by treating capacity as a proxy for external obsolescence, the tax court intended to apply an “inutility” approach, which is a cost-to-capacity measurement of obsolescence. Inutility, a generally accepted method of calculating obsolescence, is estimated by comparing the property’s capacity to its use level and adjusting the result for economies of scale. Lower capacity utilization results in lower property values. For example, if a production facility has the boilerplate capacity to manufacture 10,000 widgets a day, but can only produce 8,000 widgets daily due to market demand, a downward adjustment is made.

Guardian, 868 N.W.2d at 266 n.12.

⁶⁵ Waseca Cty.’s Mem. Concerning Effect *MERC* 15.

determinations to the testimony of the various witnesses.”⁶⁶ If we “marshal[ed] the facts and appl[ied] the inutility approach suggested by the Supreme Court,” the County concluded, we would necessarily “conclude that there was not much, if any, external obsolescence that affected the Subject Property’s taxable real property during the years at issue.”⁶⁷

E. ECONOMIC OBSOLESCENCE

Our September 2014 findings of fact and conclusions of law reduced replacement costs as of January 2, 2009, and January 2, 2010, based on excess capacity in the ethanol industry as of those years. *Guardian*, 2014 WL 7476215, at *43. On appeal, the Minnesota Supreme Court concluded that we “failed to explain adequately” why we rejected the approaches to obsolescence taken by the parties’ respective expert appraisers, or why we selected excess capacity as the appropriate measure of external obsolescence. *Guardian*, 868 N.W.2d at 266-67. We therefore begin by reviewing some basic concepts of obsolescence, including generally accepted methods of calculating it.

1. Estimating the market value of special purpose properties

Real property is typically assessed at its market value. Minn. Stat. § 273.11, subd. 1 (2016). “Market value” is “the usual selling price,” namely, “the price which could be obtained at a private sale or an auction sale, if it is determined by the assessor that the price from the auction sale represents an arm’s-length transaction.” Minn. Stat. § 272.03, subd. 8 (2016).

There are three generally recognized approaches to determining the market value of real property. The sales-comparison approach determines the market value of the subject property by comparing it to similar properties that sold at or near the valuation date. The cost approach

⁶⁶ Waseca Cty.’s Mem. Concerning Effect MERC 20.

⁶⁷ Waseca Cty.’s Mem. Concerning Effect MERC 20.

estimates the value of the subject property by comparing it to the current cost of constructing a replacement for the subject property of similar utility. The income-capitalization approach capitalizes the rental income—that is, the income generated by the real property—that the subject real property is expected to generate over some relevant time period. See *Guardian*, 868 N.W.2d at 261.

When the property to be valued is a special-purpose property—one that “is treated in the market as adapted to or designed and built for a special purpose,” *Fed. Reserve Bank of Minneapolis v. State*, 313 N.W.2d 619, 621 (Minn. 1981)—application of the sales-comparison and income-capitalization approaches can be difficult. A special-purpose property is, by its nature, “not likely to be sold on the market.” *Am. Express Fin. Advisors, Inc. v. Cty. of Carver*, 573 N.W.2d 651, 656 (Minn. 1998). As a result, there are unlikely to be sales of comparable properties from which to estimate the market value of the subject property. At the same time, the income approach is problematic because special-purpose properties are typically owner-occupied, meaning “it is difficult to extract indications of either property rental income or income capitalization rates from the market.” Robert F. Reilly, *Economic Obsolescence in the Property Tax Valuation of Industrial or Commercial Properties*, J. Multistate Tax’n & Incentives *7, *9 (Aug. 2007). As a result, special-purpose properties are often valued under the cost approach alone.

Under the cost approach, “the appraiser determines the current cost of constructing the existing improvements on the property, subtracts depreciation to determine the current value of the improvements, and then adds the value of the land to determine the market value.” *Cont’l Retail, LLC v. Cty. of Hennepin*, 801 N.W.2d 395, 403 (Minn. 2011) (citing *Harold Chevrolet, Inc. v. Cty. of Hennepin*, 526 N.W.2d 54, 56 (Minn. 1995)). The three forms of depreciation to be

subtracted from the current cost of constructing the existing improvements are physical depreciation or deterioration, functional obsolescence, and external obsolescence. *Empire State Bank v. Lyon Cty.*, 454 N.W.2d 616, 617 (Minn. 1990).

2. Estimating obsolescence

External obsolescence “is a loss in value caused by negative externalities, i.e., factors outside a property.” The Appraisal Institute, *Appraisal of Real Estate* 632 (14th ed. 2013) (sometimes “the Fourteenth Edition”); *id.* at 633 (noting that external obsolescence “is specifically the loss in value attributed to external influences allocated to the building improvements”); *Obsolescence*, Black’s Law Dictionary (10th ed. 2014) (defining economic or external obsolescence as “[o]bsolescence that results from external economic factors, such as decreased demand or changed government regulations”); Am. Soc. of Appraisers, *Valuing Machinery & Equipment: The Fundamentals of Appraising Machinery & Technical Assets* 67 (2d ed. 2005) (describing economic obsolescence as “the loss in value of a property caused by factors external to the property,” such as “the economics of the industry; availability of financing; loss of material and/or labor sources; passage of new legislation; changes in ordinances; increased cost of raw materials, labor or utilities (without an offsetting increase in product price); reduced demand for the product; increased competition; inflation or high interest rates; or similar factors”).

Obsolescence can be attributed to location or to market forces. *Appraisal of Real Estate* 633.⁶⁸ In this case, neither expert found any obsolescence attributable to the location of the subject property.⁶⁹ Accordingly, our focus here is on economic obsolescence, that is, obsolescence

⁶⁸ For example, an apartment building downwind of a new asphalt plant may suffer from obsolescence attributable to its (now) relatively undesirable location. See *Appraisal of Real Estate* 635.

⁶⁹ Ex. 22, at 82; Ex. GG, at 162.

attributable to market forces. See *Guardian*, 868 N.W.2d at 257 n.5 (“Only market obsolescence is at issue in this appeal.”); *Appraisal of Real Estate* 632 (noting that “[e]xternal obsolescence is sometimes called *economic obsolescence* because economic factors outside the control of property owners, like mortgage interest rates and changing employment levels, can have large effects on the value of real estate”).

As the Fourteenth Edition notes, not all externalities affect market value, and those externalities that do affect market value may do so differentially:

[E]xternalities such as inflation or natural disasters may increase material and labor costs without a corresponding increase in market values. Real estate values do not always run parallel with other economic trends. . . . On the other hand, an external event such as the completion of a sewer line may increase the value of a property but have no effect on its cost.

Appraisal of Real Estate 565.

The Fourteenth Edition describes several methods of estimating obsolescence, all of which are comparative in their approaches. One such method is to make a “[d]irect comparison of similar properties with and without external obsolescence,” a method characterized as “the most persuasive measurement of the effect of negative externalities on value when enough data is available for that sort of analysis.” *Id.* at 634-35. Essentially a variant of the sales comparison approach using paired data analysis, the Fourteenth Edition uses as an example of the method an apartment building “located downwind of a relatively new asphalt batching plant.” *Id.* at 635. The example explains that by comparing sales of other comparable apartment buildings and vacant lots in the same neighborhood with unaffected properties across town, an appraiser could estimate external (locational) obsolescence attributable to the property as a whole and to the land in particular. *Id.*

Use of this method requires the identification of “similar properties with and without external obsolescence.” *Id.* at 634. Because the use of this method requires the identification of

“similar properties with and without external obsolescence,” *id.*, it necessarily requires some evidence of the source of external obsolescence. In the Fourteenth Edition’s example, the hypothesized source was the construction of an asphalt plant nearby and, presumably, the effect on the desirability of the subject property of such things as the increased truck traffic and noise. *Id.*

An alternative, according to the Fourteenth Edition, “is the capitalization of income lost due to the effect of the externality.” *Id.* at 635. This approach first requires analysis of the market “to quantify the income loss” due to the externality. *Id.* The income loss is then “capitalized to obtain the value loss affecting the property as a whole.” *Id.* “If the income loss is anticipated to last for the economic life of the improvements, it can be capitalized by applying either a gross income multiplier to a gross income loss or an overall capitalization rate to a net income loss.” *Id.* at 635-36. But if the income loss “is not anticipated to be long-term, it can be estimated using discounted cash flow analysis.” *Id.* at 636. Again, the use of this method necessarily requires some identification of the externality, in order to determine whether the income loss will be short- or long-term.

The Fourteenth Edition uses as an example of this approach a retail shopping center “in a market that has been hurt by a sudden, and long-term, population loss and demographic shift in the neighborhood.” *Id.* Here, the comparison is not between the subject property and other properties, but the subject property to itself. To quantify the income lost to the externality, the example compares average rents for the property’s first five years of operation (a period before the demographic shift, and which rents the Fourteenth Edition characterizes as “equilibrium rent”) to current (post-shift) rent levels. *Id.* Then, because the demographic shift is considered long-term,

the lost rent is capitalized at an overall rate to arrive at the effect of the externality on property value. *Id.*⁷⁰

As we have indicated, the methods prescribed by the Fourteenth Edition for estimating obsolescence are comparative in nature, as are the methods approved by the supreme court in *MERC* and *Menard*. In *MERC*, the taxpayer compared its financial performance with other companies in the industry and with its own historical results, approaches the supreme court called “at least sufficient to make out a prima facie case of economic obsolescence.” 886 N.W.2d at 799. In contrast, in *Menard* the taxpayer relied solely on “nationwide economic trends,” making no comparisons either to the performance of home improvement stores in general or to the performance of the store in question. 886 N.W.2d at 816. The supreme court called that evidence insufficient. *Id.* (the supreme court requiring evidence “that nationwide economic trends produced external obsolescence” in the subject property’s market area).

We further note that the “income loss” to be capitalized is ordinarily of *rental income*. Again, to quantify income lost to the externality, the Fourteenth Edition prescribes a comparison of “equilibrium rent” (that is, rent without the effects of the externality) and “actual rent affected

⁷⁰ If the income loss of the retail center

were the result of a temporary oversupply of competitive properties in the market rather than some long-term phenomenon, the value loss could be calculated using discounted cash flow analysis rather than direct capitalization. In that case, two cash flow projections could be prepared, one based on forecasted rent and occupancy and another at equilibrium rent and stabilized occupancy. The sum of the present values of the income shortfalls over the projection period would be the value loss due to the externality.

Appraisal of Real Estate 637-38.

by the external factor in the current market.” *Appraisal of Real Estate* 636.⁷¹ As we have indicated, however, special-purpose properties are typically owner-occupied and are rarely rented.⁷²

As a third approach, one can estimate total depreciation from all causes (physical deterioration, functional obsolescence, and external obsolescence) using the “market extraction” approach, and then parse total depreciation into its various components by one of the other methods. *Id.* at 605. As we will explain, the County’s appraiser, Mr. Dodd, estimated obsolescence using this approach.

Having summarized several generally accepted approaches to estimating economic obsolescence, we turn to the parties’ experts’ respective calculations of obsolescence.

⁷¹ The Fourteenth Edition defines “equilibrium rent” as “[t]he amount of rent a property would be expected to bring in a market at equilibrium, contrasted with market rent that is affected by market conditions not at equilibrium.” *Appraisal of Real Estate* 636.

⁷² According to the supreme court, “the capitalization of the income loss attributable to the negative market influences is a generally respected [sic] approach to calculating external obsolescence.” *Guardian*, 868 N.W.2d at 267 (calling our “disregard of declining profit margins” on ethanol production “particularly confounding because the *capitalization of the income loss attributable to the negative market influences* is a generally respected approach to calculating external obsolescence”) (emphasis added). The supreme court’s description of the approach is over-broad: the “income” loss to be capitalized is generally of *rental* income, not the income generated by the business operating at the affected property. That is because the cash flows generated by a business operating from leased space accrue to the owner of the *business*, not to the owner of the *building*.

We make these observations in hopes of avoiding a flood of businesses operating from leased space (or from property not considered special-purpose) seeking a reduction in property values (and associated property taxes) as a result of the supreme court’s language due solely to business losses.

3. The County's approaches to estimating obsolescence

As we have indicated, the County's appraiser, Mr. Dodd, estimated economic obsolescence by using the market extraction approach. The Fourteenth Edition details the steps involved in applying the market extraction approach to calculate total depreciation:

1. Find and verify sales of comparable improved properties that are similar in terms of age and utility to the subject property. *Appraisal of Real Estate* 605.

In this case, Mr. Dodd considered four ethanol plants that sold between July and September 2009.⁷³ As the Fourteenth Edition notes, “[a]lthough it is desirable, it is not essential that the comparable sales be current sales or be located in the subject property’s area.” *Id.* at 605. Mr. Dodd’s comparables included the subject property and three others, located in Dyersville, Iowa; Hankinson, North Dakota; and Marion, South Dakota.⁷⁴ All are 100 Mgy nameplate capacity ethanol facilities built using Fagen’s ICM technology.⁷⁵ Mr. Dodd selected these plants even though he did not complete a sales comparison approach, reasoning that transactions involving ethanol plants between 2009 and 2011 “generally involved plants that were sold under distressed circumstances.”⁷⁶

⁷³ Ex. GG, at 164-65.

⁷⁴ Ex. GG, at 165.

⁷⁵ Ex. GG, at 164-65. According to the Fourteenth Edition, the comparables should also be from “comparable” markets, that is, markets with “similar tastes, preferences, and external influences.” *Appraisal of Real Estate* 605. Considering the subject property is a special-use property, we think that “tastes, preferences, and external influences” play far less of a role here.

⁷⁶ See Ex. GG, at 132.

2. Make appropriate adjustments to the comparable sales prices for certain factors, including property rights conveyed, financing, and conditions of sale. *Appraisal of Real Estate* 605.

Mr. Dodd adjusted the sale price of each facility only for financing.⁷⁷ *See id.* (“An adjustment for market conditions is not made because the appraiser is estimating cost and depreciation at the time of the sale. No adjustments are made for physical, functional, or external impairments because these factors are the source of the depreciation that is being measured.”). In particular, Mr. Dodd adjusted the sale price of each facility down by 10% to reflect the typical 75% loan-to-value ratio, rather than the loan-to-value ratio actually present in each sale.⁷⁸

3. Subtract the value of the land at the time of sale from the sale price of each comparable property to isolate the contributory value of the improvements. *Appraisal of Real Estate* 605.

As a subtraction for land values, Mr. Dodd reduced the sale price of each comparable facility by \$.015 per gallon of nameplate capacity.⁷⁹ Mr. Dodd thus arrived at adjusted sales prices of the four plants for the improvements alone ranging from \$.792 to \$.889 per gallon of nameplate capacity.⁸⁰

4. Estimate the cost of the improvements for each comparable property at the time of its sale. The cost estimates should have the same basis—i.e., reproduction cost or replacement cost. Typically replacement cost is used because the appraiser may not have sufficient information on all the sales to develop a credible opinion of reproduction cost. Also, the cost estimate

⁷⁷ Ex. GG, at 165-66.

⁷⁸ Ex. GG, at 165-66. For example, Guardian Energy was required to provide \$12 million in equity to purchase the subject property in July 2009, according to Mr. Dodd, representing a loan-to-value ratio of 87%. Ex. GG, at 165.

⁷⁹ Ex. GG, at 165.

⁸⁰ Ex. GG, at 165.

should include all direct costs, indirect costs, and entrepreneurial profit for the improvements. *Appraisal of Real Estate* 608.

Mr. Dodd estimated the replacement cost of a 100 Mgy ethanol plant to be \$162.8 million, or \$1.628 per gallon of annual nameplate capacity.⁸¹

5. Subtract the contributory value of all improvements from the current construction cost to determine the total dollar amount of depreciation of the improvements as of the date the sale occurred. The extracted depreciation includes all forms of depreciation. *Appraisal of Real Estate* 608.

Making the indicated subtraction yielded total depreciation on a per-gallon basis ranging from \$0.739 to \$0.836 per gallon.

6. Convert the dollar estimates of depreciation into percentages by dividing each estimate of total depreciation by the construction cost at the time of sale. If the ages of the sales are relatively similar to the age of the subject property, the percentages of total depreciation can be reconciled into a rate appropriate for the subject property. This rate is applied to the subject's cost to derive an estimate of the subject's total depreciation. *Appraisal of Real Estate* 608.

Dividing total depreciation on a per-gallon basis by his estimate of replacement cost (\$1.628), also on a gallon-of-nameplate-capacity basis, Mr. Dodd arrived at figures ranging from 45.4% to 51.4%.⁸² Mr. Dodd made no adjustments for known physical deterioration or

⁸¹ Ex. GG, at 163; *see* Ex. GG, at 170-73 (estimating the replacement cost of a 100 Mgy ethanol plant to be \$1.55 per gallon of annual nameplate capacity), 163 (adding 5.0% to replacement costs for entrepreneurial profit). Mr. Dodd's estimates of replacement cost exclude land values. *See id.* at 170-73.

⁸² Ex. GG, at 165. For example, Mr. Dodd calculated the adjusted 2009 sale price of the subject facility to be \$0.815 per gallon of annual nameplate capacity. Dividing that figure by \$1.628 (Mr. Dodd's estimate of the cost of constructing a comparable facility on a per-gallon basis) yielded a figure of 49.9%.

If the ages of the comparable facilities differ from the age of the subject property, the Fourteenth Edition prescribes the development of an annual depreciation rate. *Appraisal of Real Estate* 608. In this case, the comparable properties were similar in age to the subject property, and Mr. Dodd did not compute an annual depreciation rate.

functional obsolescence of any of the other facilities (in order to isolate external obsolescence), although three of them were a year old at the date of sale.⁸³ *See Appraisal of Real Estate* 608 (indicating that the market extraction approach results in estimates of total depreciation).

Because all four sales occurred under distressed conditions, however, Mr. Dodd reasoned that the calculated rates overstated external obsolescence.⁸⁴

[A]ll of the transactions involved sales by mortgagees, which had previously taken back their respective properties at a bankruptcy auction. Such mortgagees are not in the business of owning and operating ethanol plants. In fact, the plants remained idle during the mortgagees' holding periods. Holding costs were also being incurred during their ownership of the plants. Furthermore, the mortgagees have no incentive to achieve a sales price above their debt financing and costs.

Mr. Dodd also considered Valero's March 2009 acquisition of seven ethanol plants with a total nameplate capacity of 750 Mgy for a total price of \$484.6 million.⁸⁵ Mr. Dodd compared the total purchase price of these plants (\$.646 per gallon) to his calculated cost of construction (again, \$1.628 per gallon).⁸⁶ Mr. Dodd adjusted the result for physical deterioration, estimated at 8.0% across the seven plants.⁸⁷ Mr. Dodd further reduced the price by \$.015 per gallon of nameplate capacity, again "to factor out land value."⁸⁸ Mr. Dodd accordingly estimated external

⁸³ Ex. GG, at 165. All four were 100 Mgy facilities constructed using Fagen's ICM technology, and we would expect no subtraction for functional obsolescence.

⁸⁴ Ex. GG, at 166.

⁸⁵ Ex. GG, at 92, 163-64. According to Mr. Dodd, all seven plants were designed and built by Fagen using ICM technology, just as the subject facility, and each had a nameplate capacity of at least 100 Mgy. Ex. GG, at 163. Four of the seven plants are located in Iowa, with one plant each in Minnesota, South Dakota, and Nebraska. Ex. GG, at 92.

⁸⁶ Ex. GG, at 163.

⁸⁷ Ex. GG, at 163.

⁸⁸ Ex. GG, at 163-65.

obsolescence of these plants to be 57.85%.⁸⁹ Mr. Dodd concluded that this estimate also likely overstated the amount of external obsolescence, in large part because in purchasing the seven idle ethanol plants from the VeraSun bankruptcy estate, Valero paid “a liquidation value, as opposed to market value.”⁹⁰

“Considering all,” then, Mr. Dodd arrived at rates of external obsolescence of 45% as of January 2, 2009; 35% as of January 2, 2010; and 25% as of January 2, 2011.^{91 92}

⁸⁹ Ex. GG, at 164. $1 - ((\$0.646 - .015) / (\$1.628 * .92)) = 57.85\%$. The numerator of the fraction is Valero’s cost minus land value. The denominator is construction cost less 8% physical depreciation.

⁹⁰ Ex. GG, at 164. For example, assuming each bank followed the common practice of bidding the amount of its outstanding loan, and assuming a 75% loan-to-value ratio, a bank’s bid to purchase a facility in foreclosure or bankruptcy for, say, \$100 million (the bank’s holding costs aside) implies the property had an appraised value of roughly \$133 million when the loan closed. Any increase in the assumed purchase price, in turn, reduces the estimate of external obsolescence.

⁹¹ Ex. GG, at 166.

⁹² The supreme court seems to have concluded that Mr. Dodd estimated economic obsolescence based on declining industry-wide profit margins. *See Guardian*, 868 N.W.2d at 266 (criticizing this court for “reject[ing] entirely the decline in ethanol profit margins that both parties’ appraisers found to be a primary consideration in determining external obsolescence”); *see* Pet’r’s Proposed Findings Fact Conclusions Law ¶ 182 (filed Apr. 30, 2014) (*Guardian* urging this court to find that its appraisers’ “analysis was based primarily upon the decrease in the profit margin on a gallon of ethanol”). However, just a page before, the court explained Mr. Dodd’s entirely different approach to obsolescence. *Id.* at 265; *see id.* (“The County’s appraiser also cited overcapacity and deteriorating profit margins as factors contributing to the property’s external obsolescence, but the appraiser decreased the reduction for external obsolescence for 2010 and 2011, as sales of ethanol plants ‘clearly show[ed] an upward trend in prices after early-to-mid 2009.’”). Nowhere in the record is the decline in ethanol profit margins described as “a primary consideration” in the *County’s expert’s* determination of external obsolescence and, as we have shown, it was only one of several considerations. *See* Ex. GG, at 162 (Mr. Dodd listing “the prevailing industry conditions” contributing to economic obsolescence: overcapacity, substantial deterioration in profit margins, financial difficulties of several producers, and difficulties in obtaining financing).

a. Guardian's criticisms of the County's approach

In post-trial briefing, Guardian urged us to find that Mr. Dodd's analysis of economic obsolescence was "not adequately supported or reliable."⁹³ For example, Guardian asked us to find that Mr. Dodd's analysis,

which relies on a comparison of whole ethanol plant sales which does not discriminate between obsolescence attributable to taxable real property and personal property, is not reliable because [Mr. Dodd] made no adjustments to the sales prices of the comparable facilities for (i) machinery and equipment included in the sale prices, (ii) market conditions, (iii) location, (iv) quality of improvements, or (v) specific differences in tax climates, all of which should be considered when analyzing sales.⁹⁴

Guardian also criticized Mr. Dodd for opining that economic obsolescence declined across the three valuation dates, urging us to "find that the data upon which [Mr. Dodd] relied for these

⁹³ Pet'r's Proposed Findings Fact Conclusions Law ¶ 186.

⁹⁴ Pet'r's Proposed Findings Fact Conclusions Law ¶¶ 185-87. On appeal, Guardian took a different tack. Rather than argue that this court erred in its assessment of Guardian's experts' opinion, Guardian argued that its expert appraisers' opinion was so flawed that it failed to overcome the prima facie validity of the assessments. Br. Relator Guardian Energy, LLC 15, Nos. A14-1883 & A14-2168 (filed Jan. 22, 2015) ("Where the Tax Court made such extensive and pervasive findings that the Guardian appraisers' analysis was unreliable and lacked credibility, there is no factual basis in the record for the Tax Court to have also concluded that Guardian met its burden of proof to demonstrate that the assessment was excessive."). This was also directly contrary to Guardian's position at trial, as the supreme court readily noted:

Guardian now argues that the tax court could not both reject almost all of Guardian's evidence regarding valuation and find that Guardian had produced "credible evidence" to rebut the presumption of validity. We disagree. The record establishes that Guardian and the County agreed at trial that the County's original assessment was not valid. This agreement between the parties stands. Moreover, Guardian presented sufficient evidence to overcome the presumption of prima facie validity afforded to the assessor's estimated market value for the subject property, even if that evidence was insufficient for purposes of valuation.

Guardian Energy, 868 N.W.2d at 258 n.6 (citations omitted).

conclusions, including information about crush margins, grind margins and upward trends in prices paid for ethanol plants, does not support his conclusions.”⁹⁵

Guardian continued to criticize Mr. Dodd’s approach in its post-trial memorandum. For example, Guardian posited that “[t]he decrease in external obsolescence by Mr. Dodd in 2011 lacks market support and is contradicted by market information in his own appraisal.”⁹⁶ Guardian further posited that Mr. Dodd’s claim of “an upward trend in prices paid for ethanol plants after early-to-mid 2009” was “based on an incomplete analysis of the sales transactions” because “Mr. Dodd failed to make required adjustments to his industry transactions necessary to accurately identify any trend in sales prices or in the industry in general.”⁹⁷ Indeed, Guardian argued that Mr. Dodd’s “incomplete” analysis did not “provide a quantitative or qualitative basis demonstrating that the external obsolescence rate improved specifically from 45% in 2009 to 35% in 2010 and 25% in 2011.”⁹⁸ As a final criticism, Guardian directly challenged Mr. Dodd’s credibility as a witness, noting that

near the end of his testimony, Mr. Dodd stated that just prior to finalizing his report he changed his conclusions of economic obsolescence in 2010 and 2011 to lower figures, based in part on his unsupported feeling “that 25 percent economic obsolescence was probably a pretty generous estimate. . . .” This analysis is not

⁹⁵ Pet’r’s Proposed Findings Fact Conclusions Law ¶¶ 188-89.

⁹⁶ Pet’r’s Post-Trial Br. 16; *see id.* at 17 (Guardian arguing that “the crush margin and grind margin data upon which Mr. Dodd relied do not actually reflect significantly improving margins during 2009 and 2010. In fact, the reported grind margin was perfectly flat from 2009 through 2010 . . . and the crush margin in 2010 . . . was equal to the reported 2008 levels, undermining this analysis of the change in market conditions.”).

⁹⁷ Pet’r’s Post-Trial Br. 17-18.

⁹⁸ Pet’r’s Post-Trial Br. 18.

sufficient to explain or quantify a credible conclusion about specific amounts of obsolescence.⁹⁹

In its reply memorandum, Guardian's criticisms of Mr. Dodd's approach grew only more harsh, calling his "analysis and testimony [] undeserving of *any* credibility."¹⁰⁰ Guardian emphasized the subjectivity of Mr. Dodd's analysis:

⁹⁹ Pet'r's Post-Trial Br. 18 n.14 (citing Tr. 1110-111).

¹⁰⁰ Pet'r's Post-Trial Reply Br. 1 (filed May 14, 2014) (emphasis added). In closing arguments, Guardian continued the attack, calling Mr. Dodd's testimony "suspect," Tr. 1194, and his conclusions "an analysis that escapes logic," Tr. 1196. In fact, Guardian all but accused Mr. Dodd of perjury because of internal inconsistencies in his original report:

We have, in our brief, identified a series of other errors made by Mr. Dodd, some of which were acknowledged, some of which were corrected, some of which were loosely characterized as being offsetting and not fully analyzed, as his testimony considered the final thoughts as he completed his appraisal were identified.

Now, what brought about the discussion was the conclusions in his summary at the beginning of the appraisal report did not match the conclusion at the end of his analysis. And here we're referring back to the original Exhibit GG which was exchanged prior to trial.

He testified in his analysis, beginning in the transcript at page 1107, that at the last minute he made some phone calls and lowered the value of the stainless tanks. He did not recall by how much, he did not identify any range of what the value was. And we would urge the Court to take a look at GG supplement, which includes notes of some conversations.

[Mr. Dodd] was unable to identify which, if any, of those phone calls were the cause of lowering his estimate of the value of the stainless tanks or to quantify it. He also testified that he decided at the last minute to lower the anhydrous ammonia tank from 123,000 to 9,500. He also decided at the last minute to lower his land value from 10,000 an acre to 8,000 an acre in 2009. These last two adjustments, the anhydrous ammonia tank and the land value, would have reduced his value by a total of \$319,000—I'm sorry, \$315,120.

Yet then in a final act, after recognizing that certain excesses existed and needed to be reduced, he then decided to increase his values because he had this intuitive feeling, this gut instinct, that despite the analysis he went through, despite his detailed study of the ethanol industry, the ethanol market, corn prices, margins, all of his analysis, including his analysis of the federal legislation mandating the

Mr. Dodd conceded that, shortly before finalizing his report, he altered his conclusions about market conditions based on considerations other than those which his report discussed. *See* Tr. 1109:19-1111:25 (he lowered his external obsolescence in 2010 and 2011 at the last minute based on his instinct that the market was coming into equilibrium, and a “feeling” that his initial estimates of obsolescence were too high.) These downward adjustments to external obsolescence were large enough to offset the last-minute downward adjustments to his land value, anhydrous ammonia and tank cost conclusions, resulting in his value increasing by a net \$2.19 to \$2.21 million despite the three downward adjustments. This analysis ignores the principled analysis articulated in [a chapter written by Mr. Dodd in a book on valuing industrial properties] and the two other [] appraisals [of other ethanol plants previously conducted by Mr. Dodd], relying upon his “feeling” rather than empirically based market analysis.¹⁰¹

b. Our evaluation of the County’s approach

Although we found Mr. Dodd a credible and knowledgeable witness, we generally agreed with Guardian’s criticisms of Mr. Dodd’s approach to economic obsolescence:

Guardian finds fault with Mr. Dodd’s approach, particularly his failure to account for such things as machinery and equipment included in the sales of the other plants, differences in market conditions, differences in location, and differences in the quality of the improvements. We agree.

Guardian, 2014 WL 7476215, at *44 (citation omitted). We rejected Mr. Dodd’s approach for several reasons.

production levels of ethanol, he suddenly decided, well, I need to go back and revisit my external obsolescence.

And in doing that, he decreased his external obsolescence by an amount that was enough to not only overcome the reductions from the tanks, the anhydrous ammonia, and the land value, but to also increase the value by 2.19 million. Because he doesn’t know how much his tanks were changed, we can’t quantify with any precision whatsoever. But just the other two indicate that he decreased his external obsolescence by more than \$2.5 million.

His testimony as to why he did that is suspect. . . .

Tr. 1192-97.

¹⁰¹ Pet’r’s Post-Trial Reply Br. 12-13 (footnotes omitted).

First, we agreed with Guardian¹⁰² that Mr. Dodd should have adjusted the sale prices of other ethanol plants for such things as the machinery and equipment included in the sale. *Id.*

Second, we found that Mr. Dodd's calculation of the cost of constructing a new dry-grind ethanol plant lacked adequate foundation. *Id.* For example, the sample of ethanol plants from which Mr. Dodd estimated the cost of constructing a new 100 Mgy ethanol plant encompassed 50 Mgy, 55 Mgy, and 100 Mgy capacity plants.¹⁰³ We would expect each contract to include some fixed costs (that is, costs to be incurred regardless of nameplate capacity), such as mobilization and de-mobilization (the cost of moving necessary construction equipment to and from the site), engineering, and general conditions.¹⁰⁴ For this reason, we questioned whether the cost of an ethanol plant can be calculated reliably on a per-gallon basis alone. Indeed, Mr. Dodd's per-gallon estimates of construction costs appear to vary depending on the size of the facility. For example, Mr. Dodd's estimate of the per-gallon cost of the 100-Mgy facility in New Hampton, Iowa (\$1.415) is significantly less than the per-gallon cost of the smaller 50-Mgy facility in Lambertton,

¹⁰² Pet'r's Post-Trial Br. 17 n.12 (noting that Mr. Dodd made no adjustments to the sale prices of the four ethanol plants "for: (i) machinery and equipment included in the sale prices, (ii) market conditions, (iii) location, (iv) quality of improvements, or (v) specific differences in tax climates, all of which should be considered when analyzing these sales."). We disagree with Guardian on at least one point: there should be no adjustment for "market conditions." *See Appraisal of Real Estate* 605 ("An adjustment for market conditions is not made because the appraiser is estimating cost and depreciation at the time of the sale."). Nor are there adjustments "for physical, functional, or external impairments because these factors are the source of the depreciation that is being measured." *Id.* To the extent that Guardian's proffered adjustment for "quality of improvements" refers to physical or functional impairments, we also disagree.

¹⁰³ Ex. GG, at 170-73.

¹⁰⁴ *See* Ex. 43 (detailing the categories of costs associated with the construction of an ethanol plant).

Minnesota (\$2.042), even though construction commenced on the two facilities only a few months apart.¹⁰⁵

Third, to eliminate the value of land, Mr. Dodd adjusted the sale price of each comparable facility downward by \$.015 per gallon of nameplate capacity.¹⁰⁶ In other words, Mr. Dodd subtracted \$1.5 million from the sale price of each 100 Mgy plant, regardless of the facility's location. There was no empirical basis or explanation for the reasonableness of such an arbitrary adjustment.

Finally, as we noted, the market extraction approach yields estimates of *total* depreciation.¹⁰⁷ Although Mr. Dodd adjusted for physical deterioration in his evaluation of the Valero purchases, he did not appear to have done so with respect to the four facilities he separately evaluated.¹⁰⁸

c. Guardian's contrary post-MERC position

In light of *MERC*, Guardian does an about-face, arguing that we “should revise our [September 2016 decision] to adopt external obsolescence estimates proximate to those testified

¹⁰⁵ See Ex. GG, at 171. The difference cannot be attributed to location: Lamberton, Minnesota is closer to Fagen's headquarters in Granite Falls, Minnesota, than is New Hampton, Iowa. Mr. Dodd adjusted the construction costs of the smaller ethanol facilities down by 25%, but without explaining the basis for the adjustment. See Ex. GG, at 172.

¹⁰⁶ Ex. GG, at 164-65.

¹⁰⁷ Ethanol facilities using Fagen's ICM technology were considered state-of-the-art, and there is no evidence that such facilities suffered from functional obsolescence.

¹⁰⁸ Compare Ex. GG, at 163, with Ex. GG, at 164-66. Of the four plants Mr. Dodd considered, one (the subject property) was new at the time of sale. The other three were each one year old, meaning that at least some of the decline in value may have been attributable to physical deterioration. Ex. GG, at 165. By comparison, with respect to the Valero purchases, Mr. Dodd assumed a weighted-average effective age of 2.4 years and physical deterioration of 6.0%, or about 2.5% per year. Ex. GG, at 163.

to by Mr. Clay Dodd, Waseca County's appraiser," rather than those of Guardian's own appraisers, the Shenehon firm.¹⁰⁹ Analysis that Guardian previously characterized as "not reliable," "not adequately supported,"¹¹⁰ and "contradicted by market information in [Mr. Dodd's] own appraisal,"¹¹¹ it now soft-pedals as "*relatively inconsequential* issues involving *some* of [Mr. Dodd's] calculations."¹¹² Indeed, once called "undeserving of *any* credibility"¹¹³ and mocked during closing argument as "comprehensive, reliable, [and] experienced,"¹¹⁴ Mr. Dodd is now portrayed as *the only* authority on which this court should rely for evidence of economic obsolescence.¹¹⁵

d. Our conclusions concerning Mr. Dodd's analysis

We declined, in both 2014 and 2016, to put much weight on Mr. Dodd's analysis of economic obsolescence, and our position has not changed. We reject Guardian's intimation that *MERC* requires us to accept either expert's opinion of economic obsolescence at face value.¹¹⁶ As the finder of fact, the *MERC* court reaffirmed, we are "entitled to resolve the conflicts in the record and determine how much weight to give each expert report." 886 N.W.2d at 794. The supreme

¹⁰⁹ Guardian's Mem. Regarding Effect *MERC* 15.

¹¹⁰ Pet'r's Proposed Findings Fact Conclusions Law ¶¶ 186, 187.

¹¹¹ Pet'r's Post-Trial Br. 16.

¹¹² Guardian's Mem. Regarding Effect *MERC* 7 (emphasis added).

¹¹³ Pet'r's Post-Trial Reply Br. 1.

¹¹⁴ Tr. 1197.

¹¹⁵ Guardian's Mem. Regarding Effect *MERC* 15.

¹¹⁶ See Guardian's Mem. Regarding Effect *MERC* 5-6; see *id.* at 5 (claiming "the parties' experts agreed on (a) the presence of external obsolescence, (b) the causes of external obsolescence, (c) the approximate amount of external obsolescence, and (d) how the effect of the external obsolescence on the Guardian plant is evidenced").

court was explicit: “We do not suggest that the tax court, on remand, is required to find the existence of external obsolescence.” *Id.* at 799. Nor, according to the supreme court, were we required to “accept the testimony of MERC’s witnesses.” *Id.* “*It will be the tax court’s task on remand to consider all of the evidence presented* to determine whether the evidence of external obsolescence is sufficient to support a downward adjustment to the estimated market value of MERC’s property under the cost approach.” *Id.* (emphasis added).¹¹⁷

Contrary to Guardian’s arguments here, our criticisms of Mr. Dodd’s analysis were not grounded in the *Eurofresh* framework. Rather, they were grounded in the record evidence, or lack thereof, supporting Mr. Dodd’s analysis. Under *MERC*, we are to “view[] the evidence as a whole, to determine” whether the subject property suffers from external obsolescence and by how much. *Id.* at 798. But the supreme court remanded *MERC* to this court specifically “to determine whether the *evidence* of external obsolescence is sufficient to support” a reduction in market value. *Id.* at 799 (emphasis added). In this case, we concluded that Mr. Dodd’s analysis may have supported the existence of economic obsolescence, an issue as to which the County has no burden of proof, but was not sufficient to determine the amount of the reduction in value for it.¹¹⁸

¹¹⁷ On remand, we considered all of the evidence presented and concluded that MERC had not demonstrated the existence of external obsolescence. *Minn. Energy Res. Corp. v. Comm’r of Revenue*, No. 8041 et al., 2017 WL 1430663, at *4, *10 (Minn. T.C. Apr. 18, 2017).

¹¹⁸ Nor was there sufficient evidence in the record from which Mr. Dodd’s analysis could be adjusted. For example, as Guardian itself pointed out, Mr. Dodd should have adjusted the sale prices of other ethanol plants for the value of the machinery and equipment included in the sale. Pet’r’s Post-Trial Br. 17 n.12. Our record lacked that information. Similarly, we concluded that Mr. Dodd’s reduction in the sale price of each comparable facility by \$.015 per gallon of nameplate capacity was arbitrary, but our record lacked information about actual land values for those comparable facilities. It is unclear whether information needed to make the necessary adjustments would have been available from any reliable source, even on remand.

In post-trial briefing, the County suggested that economic obsolescence could alternatively be measured by the proportion of ethanol plants operating as of each valuation date.¹¹⁹ According to the County, 89% of U.S. ethanol plants (170 out of 191) were operating as of January 1, 2009; 94.5% (189 out of 200) were operating as of January 1, 2010, and 99.5% (204 out of 205) were operating as of January 1, 2011.¹²⁰ The County urged us to find “[i]t would be reasonable to conclude that the ratio of closed to operational plants is a strong indicator of the external obsolescence of the Subject Property.”¹²¹

¹¹⁹ Waseca Cty.’s Post-Trial Proposed Findings Fact Conclusions Law Order ¶ 183 (filed Apr. 30, 2014) (urging this court to find “the number of plant closures as of each date of value as an important, unbiased indicator of the level of external obsolescence”); see *Guardian*, 868 N.W.2d at 265 n.11 (the supreme court criticizing our decision not to address the County’s alternate approach).

¹²⁰ Waseca Cty.’s Post-Trial Proposed Finding ¶ 183 (citing Ex. GG, at 88).

¹²¹ Waseca Cty.’s Post-Trial Proposed Finding ¶ 183. We agree with the County in principle, and our early cases based economic obsolescence on excess production capacity and the effect of that excess capacity on construction costs.

For example, we found significant economic obsolescence applicable to a grain elevator. *Pillsbury Co. v. Comm’r of Revenue*, No. 2578, 1980 WL 1191 (Minn. T.C. Jan. 17, 1980). The subject elevator was built as a “unit-train subterminal elevator,” meant to “assemble grain from surrounding ‘country’ elevators . . . for reshipment in economically large quantities” at then-favorable freight rates. *Id.* at *1. As a subterminal elevator, it was built of concrete with a capacity of 5 million bushels of annual throughput capacity. *Id.* But within two years of the completion of construction, the Interstate Commerce Commission almost completely eliminated the favorable freight rates applicable to unit-trains, and country elevators no longer shipped their grain to the subject property for assembly into unit-trains. *Id.* at *8. Given its new lower volume, the elevator suffered from functional obsolescence (because it was constructed of concrete rather than steel, which would have been cheaper) and from economic obsolescence resulting from “under realization of the elevator’s designed grain throughput capacity.” *Id.* at *1, *8.

In other words, the purest form of economic obsolescence would seem to acknowledge that, were the subject property to be built new as of the valuation date, it would be built less expensively because of some (temporary or permanent) reduction in capacity.

But, as we have explained, the Fourteenth Edition specifically sanctions measuring economic obsolescence based on the profitability of the subject property. *Appraisal of Real Estate* 635-36. Although we share the County’s concerns about measuring costs using the income

We reject the County's alternate approach as well, first because a computation of excess capacity based on the sheer *number* of ethanol plants in operation fails to consider differences in the capacities of those plants. Ethanol plants in Minnesota alone range in size from 22 Mgy to 110 Mgy.¹²² As a simple illustration of the problems created by relying on sheer numbers of facilities open and operating, suppose the ethanol industry comprised just two facilities: a 50 Mgy facility and a 100 Mgy facility. If only one of those facilities was operating, the County would have us estimate economic obsolescence at 50%. In reality, however, the industry could be operating at 2/3 capacity if the 100 Mgy facility was operating and the 50 Mgy facility was closed, or at 1/3 capacity if the 100 Mgy facility was closed. Any measure of excess capacity in the industry should take facility size into account.¹²³

Moreover, a measure of economic obsolescence based on the proportion of ethanol plants not operating on each valuation date does not take into consideration *why* a particular plant was not operating—a reason that may reflect only on the operation of that particular plant and not on the state of the industry as a whole. As corn prices began to increase in 2008 for fear of the effect of widespread flooding in the Midwest, and believing that corn prices would go even higher, a

approach, the Fourteenth Edition specifically sanctions reducing the replacement cost of the subject property based on changes in its profitability. *Id.*

¹²² See Ex. 30, at 3.

¹²³ Based on information published by the Renewable Fuels Association, the proportion of operating to nameplate capacity industry-wide was 84.7% as of January 2009; 91.2% as of January 2010; and 96% as of January 2011. Renewable Fuels Assoc., *2009 Ethanol Industry Outlook 3* (U.S. Ethanol Production Capacity by State) (showing as of January 2009 total industry nameplate capacity of 12,475.4 Mgy and total operating capacity of 10,569.4 Mgy); Renewable Fuels Assoc., *2010 Ethanol Industry Outlook 3* (U.S. Ethanol Production Capacity by State) (showing as of January 2010 total industry nameplate capacity of 13,028.4 Mgy and total operating capacity of 11,877.4 Mgy); Renewable Fuels Assoc., *2011 Ethanol Industry Outlook 2* (U.S. Ethanol Production Capacity by State) (showing as of January 2011 total industry nameplate capacity of 14,071.4 Mgy and total operating capacity of 13,507.9 Mgy).

number of ethanol producers entered into futures contracts for corn.¹²⁴ In reality, fears of a poor corn harvest were unfounded and 2008 yields were good.¹²⁵ As corn prices fell over the summer and fall, those producers were locked into now-unfavorable purchase contracts, and a number of them (including Guardian's predecessor in interest) wound up in bankruptcy, not because of lack of demand for ethanol but because of a management decision that proved unwise.¹²⁶

Indeed, demand for ethanol was fixed by statute during the years in question. In August 2005, Congress passed the Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (codified as amended in scattered sections of 42 U.S.C.), which amended the Clean Air Act to require for the first time that ethanol be blended with gasoline at specific levels, known as the Renewable Fuel Standard (RFS). The initial renewable fuel standard required that oil refiners and blenders collectively purchase a minimum of 4 billion gallons of renewable fuel in 2006, gradually increasing to 6.1 billion gallons in 2009, 6.8 billion gallons in 2010, and 7.5 billion gallons in 2012. *See id.* § 1501.

Two years later, the Energy Independence and Security Act of 2007 (EISA), Pub. L. No. 110-140, 121 Stat. 1492 (codified as amended in scattered sections of 42 U.S.C.), substantially increased the quantities of all renewable fuels to be blended with gasoline. For example, mandated purchases of all renewable fuels in 2009 totaled 6.1 billion gallons under the 2005 renewable fuel standard; the 2007 legislation nearly doubled that mandate to 11.1 billion gallons. *See id.* at § 202 (codified as amended at 42 U.S.C § 7545(o)(2)(B)(i)(I) (2012)).

¹²⁴ Ex. GG, at 85; Tr. 170-71 (Mr. Strachota testifying).

¹²⁵ *See* Ex. GG, at 87; Tr. 171 (Mr. Strachota testifying).

¹²⁶ Ex. GG, at 87.

Similarly 2010 mandated purchases were 6.8 billion gallons under the 2005 renewable fuel standard; the 2007 legislation increased that mandate to 12.95 billion gallons. *Id.*

To summarize, even if we accept that excess production capacity is typically an appropriate measure of economic obsolescence in an industry, we would reject its use here. As we have explained, a particular ethanol plant may not have been open and operating as of a particular valuation date not because of lack of demand for ethanol, but because management of the facility entered into corn futures contracts that became unfavorable. At the same time, as we have explained, the demand for ethanol during the years in question was fixed by statute. Under the unique circumstances of this industry and the record before us, we cannot say that the proportion of ethanol plants closed or not operating as of any valuation date at issue here is an appropriate or accurate measure of economic obsolescence applicable to the subject property.

4. Guardian's approach to estimating obsolescence

Guardian's appraiser, the Shenhon firm, also took a largely subjective approach to estimating external obsolescence, concluding that the replacement cost of the subject property should be reduced by 33.3% as of each valuation date.¹²⁷

¹²⁷ Ex. 22, at 84. On remand, and contrary to its insistence that only a method of estimating economic obsolescence used by one of the two experts in this case will do, Guardian suggests yet another approach. Guardian urges us to compare our 2014 calculation of replacement cost (new) (approximately \$43 million) to the portion of the purchase price of the subject facility allocated to the real property in the Certificate of Real Estate Value (CRV) filed with Waseca County. Pet'r's Suppl. Br. Regarding Economic Obsolescence 12 n.7. According to Guardian, the parties allocated approximately \$18 million of the purchase price to the real property. Pet'r's Suppl. Br. Regarding Economic Obsolescence 12 n.7; see Ex. 17. Guardian posits that this comparison "reflects" economic obsolescence of 58%. Pet'r's Suppl. Br. Regarding Economic Obsolescence 12 n.7.

We gave the 2009 sale of the subject property to Guardian no weight in our comparable sales approach to value, largely because there was no evidence in our record as to how the parties arrived at the allocation of the purchase price to the real property. *Guardian*, 2014 WL 7476215, at *11. Although the Shenhon firm argued that the allocation was made on the basis of a Cost Segregation Study conducted by RSM McGladrey, the McGladrey study was dated two months after the CRV was filed. *Id.* Moreover, nothing in the McGladrey study indicated that the

a. Decline in value of commercial properties nationally

The Shenehon firm began its discussion by positing that between 2000 and our valuation dates (January 2009, 2010, and 2011), “the price of commercial properties (including industrial use commercial properties) trended higher until peaking in approximately the 2006 to 2007 period.”¹²⁸ “Thereafter,” according to the Shenehon firm, “values for market sales of property declined sharply to 2009 before trending flat at these low levels for the next three years.”¹²⁹ The Shenehon firm further asserted “that rural areas suffered the highest declines,” and that “[o]verall, the decline in price was proximate to -40% declines over the period.”¹³⁰

Under *Menard*, this alone is insufficient to support Guardian’s burden of proof with respect to economic obsolescence. In *Menard*, recall, we found no economic obsolescence because the

allocation was based on an appraisal of the subject property, and no such appraisal is part of the record before us. *Id.* Finally, the County determined that the sale of the subject facility to Guardian did not qualify for the sales ratio study because it was a purchase from bankruptcy. *See* Ex. 17.

There are other, obvious problems with the CRV that belie its credibility in this proceeding. The entity (RBF Acquisition V, LLC) that sold the property to Guardian purchased it only a few months before at a total purchase price of \$55 million and allocated \$49.06 million of that to personal property. *See* Ex. 16. Nothing in the CRV indicates how the parties to that transaction treated any of the buildings or other structures on the property and, specifically, whether they were considered part of the real property. More importantly, the CRV filed regarding the sale by RBF Acquisition to Guardian lists a “total purchase price” of only \$8.1 million—not the \$18 million argued by Guardian here. *See* Ex. 17. Again, nothing in the CRV indicates how the parties to that transaction treated any of the buildings or other structures on the property and, specifically, whether they were considered part of the real property.

To get to its figure of \$18 million, Guardian adds \$10 million “allocated to the tanks (which were determined to be real property by this Court),” and cites the McGladrey study. Pet’r’s Suppl. Br. Regarding Economic Obsolescence 12 n.7. But the CRV specifically denies that there was *any* personal property included in the purchase, much less \$10 million in tanks. *See* Ex. 17.

¹²⁸ Ex. 22, at 82.

¹²⁹ Ex. 22, at 82.

¹³⁰ Ex. 22, at 83.

taxpayer's expert's opinion of economic obsolescence "was 'based exclusively on broad generalizations and on national rather than local data' and the specific property" at issue. 886 N.W.2d at 816 (internal quotation omitted). The supreme court agreed, because Menard had failed to present any evidence showing (among other things) "that nationwide economic trends produced external obsolescence" in the subject property's market area. *Id.*

Similarly, the Shenehon firm's assertion of a 40% decrease in the value of commercial properties nationally lacked any tie to the market for commercial properties in Minnesota, much less in Waseca County, where this plant is located. Nor did the Shenehon firm tie the market for commercial properties (like shopping centers) to the market for ethanol production plants, nationally or locally. The fact that market value for commercial properties declined by 40% between 2006 and 2009 does not establish that the market value of ethanol plants declined during the same period. In fact, the two markets are necessarily distinct. By capitalizing the rental income generated by a commercial property, the income approach to valuing commercial properties relies on the very fact that they are rented. In contrast, business profits are used to value special-purpose properties precisely because they are *not* rented. See *Guardian*, 868 N.W.2d at 266-67 (the supreme court observing that with respect to a special-purpose property, "it is impossible to divorce the property value from the operations of the property itself for purposes of valuation"). This is the kind of "broad generalization[]" that the supreme court rejected in *Menard*.

b. Decline in ethanol margins

The Shenehon firm then asserted that between 2008 and our valuation dates, "the actual margins for ethanol plants dropped by more than one-half or at a \$.45 margin per gallon of ethanol

produced annually.”¹³¹ If this is intended as a comparison among ethanol plants open and operating in 2008, it also seems to be the kind of “broad generalization[],” unrelated to the subject property itself (which was not open or operating in 2008), that this court rejected in *Menard*. 886 N.W.2d at 816; see *Guardian*, 868 N.W.2d at 264, 267 (the supreme court noting that “it appears that Guardian Energy did not adequately connect industrywide trends to the value of the subject property”).

c. Property-specific margins

But the Shenehon firm’s ultimate opinion of economic obsolescence applicable to this plant does not appear to be based on a comparison between industry-wide margins. Rather, it appears that the Shenehon firm based its estimate of economic obsolescence on a comparison between \$1.00 per gallon, which Shenehon describes as the “forecast margin[] for the ethanol plants” in 2007, and \$0.666 per gallon, which Shenehon describes as the margin at this facility:

In 2007, the cost of constructing ethanol plants was averaging \$1.50 to \$2.00 per gallon of production capacity, and costs fall within a central tendency from \$165 million to \$180 million with the majority of costs associated with the equipment. These cost estimates were made at a time when the forecast margins for the ethanol plants were proximate to \$1.00 per gallon of ethanol produced annually. This was an assumption widely utilized during the period when the renewable fuel standard was made.

* * * *

We have reviewed margins for the subject plant, and found the subject’s margins are stronger than national averages for ethanol plants (calculated by the Renewable Fuels Association), with the subject at an average margin at \$.666 in the period from 2010 to 2011, and this level of margin is anticipated to continue in 2012 and thereafter. We, therefore, find the applicable external obsolescence

¹³¹ Ex. 22, at 83. As the County has noted, a margin (whether a “crush” or a “grind” margin) is nothing more than the difference between the value of the output of the ethanol production process and one or more of its inputs, and not a true measure of “profit.”

discount specific to the subject plant is lower, estimated at 1/3 of original cost (33.3%) for this factor (\$.666 per gallon margin is 1/3 less than \$1.00 per gallon).¹³²

In other words, the Shenehon firm's theory of economic obsolescence is based on a purported comparison of the subject plant's actual margins in 2010 and 2011 to industry margins forecast in 2007, before this facility began operations. This comparison is equally inapposite, for the following reasons.

(1) There are no forecasts of ethanol margins

First, there is no foundation in our record for Shenehon's claim that "forecast margins for the ethanol plants" were \$1.00 per gallon, in 2007 or at any other time. Mr. Torkelson of the Shenehon firm testified that he saw no forecasts by Guardian made before its purchase of the subject property.¹³³ There are no forecasts of industry-wide ethanol margins in our record, or in any source to which our record points us. More importantly, neither Guardian nor Shenehon has ever identified the source of such "forecasts."

¹³² Ex. 22, at 82-84.

¹³³ Tr. 638. Mr. Torkelson further admitted that the Shenehon firm saw no corn futures prices before 2011. Tr. 639. We are unpersuaded that anyone could forecast the price of ethanol without forecasting the cost of corn, an ethanol facility's single largest expense. Nor is there any evidence in our record that the Shenehon firm had any expertise or experience in forecasting the price of ethanol or of any of its components, either presently or prospectively. See, e.g., *Hauck v. Michelin N. Am., Inc.*, 343 F. Supp. 2d 976, 983 (D. Colo. 2004) ("[T]o be qualified in one area of a discipline or science does not necessarily demonstrate that the tendered expert is qualified in other areas of the discipline."); *Shreve v. Sears, Roebuck & Co.*, 166 F. Supp. 2d 378, 392 (D. Md. 2001) ("An expert who is a mechanical engineer is not necessarily qualified to testify as an expert on any issue within the vast field of mechanical engineering."). Indeed, the Janesville facility is the first ethanol plant appraised by the Shenehon firm. Tr. 135.

On remand, Guardian recasts its experts' \$1.00 per gallon "forecast" as an "uncontroverted conclusion" and \$1.00 as the "average anticipated profit margin" on a gallon of ethanol. Pet'r's Reply Br. 7. Whether a "forecast" or a "conclusion," we are under no obligation to accept it, even if it is "uncontroverted," because we find it lacking in credibility.

(2) Shenehon's "forecasts" of ethanol margins are its own calculations of actual margins

Rather, what the Shenehon report calls "forecasts" were *its own* (sometimes flawed) calculations of *actual* industry-wide margins on ethanol. For example, on page 84 of the Shenehon report (Ex. 22) is a chart labeled "Ethanol Price net of Corn Price Margin (per gallon)" starting in January 2000. The right-hand portion of the chart (the period beginning in January 2011) is labeled "Forecast." In reality, it depicts the Shenehon firm's calculations of *actual* margins, as Mr. Torkelson admitted.¹³⁴ The figures labeled in the Shenehon report were therefore "forecasts" only in the sense that a report of yesterday's weather is a "forecast." Although Guardian calls the evidence on this point "uncontroverted," we find it simply not credible.

¹³⁴ Tr. 534-35; *compare* Ex. 22, at 84, *with* Ex. 28. Similarly, as part of the income approach, the Shenehon firm includes a comparison of ethanol prices and wholesale gasoline prices. Ex. 22, at 108. Although the period beginning January 2012 is labeled "Forecast," Mr. Torkelson admitted that it reflects *actual* gasoline and ethanol prices. Tr. 533-34. Mr. Torkelson attempted to justify the misdirection:

[I]n my view from the standpoint of January '9, '10 and '11, the trend that occurred is foreseeable, was foreseeable for me. I would have trended level in that manner based on the information that was known in '9, '10, '11. So it falls in the category for me as a forecast which was foreseeable in the period '9, '10, '11.

Tr. 534. We disagree.

The Shenehon firm's misrepresentations extended beyond its calculations of margins. For example, the figures on page 109 of its report (Ex. 22) for "Projected" production and sales of dried distillers grains (DDGS) in 2012 and 2013 are actual results. *Compare* Ex. 22, at 109, *with* Ex. 22, at C-1 ("Historic Income Statements"). Similarly, the figures on page 110 for "Projected" results for fiscal years ended September 2012 and 2013 are similarly *actual* results. *Compare* Ex. 22, at 110, *with* Ex. 22, at C-1. As a result, although the Shenehon firm asserts that Guardian's results "trended in ways which were foreseeable in each of the valuation periods," Ex. 22, at 106, they were foreseeable only with the benefit of 20/20 hindsight.

(3) Because Shenehon's calculations overstated industry ethanol yields, they overstated industry margins

As we have explained, the Shenehon firm's "forecasts" of ethanol margins are not forecasts at all: they are nothing more than Shenehon's own calculations of actual ethanol margins. To compound the problem, in calculating actual ethanol margins, the Shenehon firm assumed a higher ethanol yield than the industry average and, having done so, then overstated its calculation of the already-overstated industry average.

Our record includes, in two slightly different forms, a chart of monthly ethanol, corn, and gasoline prices published by the United States Department of Agriculture.¹³⁵ But the Table 14 in our record differs from Table 14 as published by the Department of Agriculture in two significant ways.¹³⁶

First, the Shenehon firm *changed* the figures for corn cost per gallon of ethanol produced. The Department of Agriculture's figures assume a bushel of corn will produce 2.7 gallons of ethanol.¹³⁷ The Shenehon firm recalculated corn cost per gallon of ethanol assuming a bushel of

¹³⁵ See Ex. 28; Ex. 23A, at E1-E3. Exhibits 28 and 23A are both versions of Table 14: Fuel ethanol, corn and gasoline prices, by month, published by the U.S. Department of Agriculture (available at www.ers.usda.gov/data-products/us-bioenergy-statistics.aspx).

Table 14 also calculates "blender cost" per gallon of ethanol. Until 1990, oil refiners received a "blenders" tax credit of \$0.60 per gallon of ethanol purchased to be mixed (blended) with gasoline. See Ex. 28. Between 1990 and 2009, the credit was \$0.51 per gallon, then decreasing to \$0.45 per gallon. *Id.* The column in Table 14 marked "Blender cost" indicates the cost of ethanol to a refiner after the credit.

¹³⁶ Table 14 (Fuel ethanol, corn and gasoline prices, by month) is available at www.ers.usda.gov/data-products/us-bioenergy-statistics.aspx.

¹³⁷ See Ex. 23A, at E-3; Tr. 531 (Mr. Torkelson testifying that Table 14 assumes "a bushel of corn yield is 2.7 gallons of ethanol").

corn will produce 2.85 gallons of ethanol.¹³⁸ The effect of doing so is to decrease the apparent historical cost of corn per gallon of ethanol industry-wide. For example, the Department of Agriculture calculated the average cost of corn in January 2000 to be \$0.71 per gallon of ethanol, assuming a bushel of corn yields 2.7 gallons of ethanol.¹³⁹ But according to the Shenehon firm's version of Table 14, in January 2000 corn cost only \$0.67 per gallon of ethanol.¹⁴⁰

Then, the Shenehon firm *added* a column labeled "Margin" to Table 14, representing *Shenehon's* calculation of margin (the price of ethanol less the price of corn on a per-gallon basis) assuming a yield of *2.85 gallons of ethanol per bushel* of corn (rather than the industry standard of 2.7 gallons per bushel).¹⁴¹ Again, the column labeled "Margin" in Exhibits 23A and 28 is

¹³⁸ Tr. 531 (Mr. Torkelson testifying "the subject is 2.85, and that was what was used was the subject's actual blending").

¹³⁹ To arrive at a figure of \$0.71 per gallon, the Department of Agriculture divided the cost of corn (\$1.91 per bushel) by the 2.7 gallons of ethanol it should produce. *See* Table 14, at Jan-00; Ex. 28 at n.2 ("one bushel of corn yields 2.7 gallons of ethanol").

¹⁴⁰ *See* Ex. 28, at Jan-00. To arrive at a figure of only \$0.67 per gallon, the Shenehon firm divided the cost of corn (\$1.91 per bushel) by 2.85 gallons of ethanol.

¹⁴¹ *See* Ex. 28. "Yield" is the amount of ethanol generated by one bushel of corn; "margin" is some measure of the difference between the price of ethanol and the cost of corn. To calculate margin, the Shenehon firm first calculated the cost of the corn required to generate a gallon of ethanol. If one bushel of corn yields 2.7 gallons of ethanol and a bushel of corn cost \$3.05, then the cost of corn per gallon of ethanol is \$1.13 ($\$3.05 / 2.7$). If ethanol sells for \$2.26 per gallon, the margin on a gallon of ethanol is \$1.13 ($\2.26 minus $\$1.13$). If, on the other hand, one assumes a bushel of corn yields 2.85 gallons of ethanol, the cost of corn per gallon of ethanol is only \$1.07 ($\$3.05 / 2.85$) and the margin is \$1.19 ($\2.26 minus $\$1.07$).

Because of the inconsistencies in Exhibit 28, we directed Guardian to compare the exhibit to its purported source, Table 14, and if necessary file and serve an amended exhibit. Order for Briefing 3 (filed Mar. 21, 2016). The County objected to allowing Guardian to amend Exhibit 28. Letter from Marc J Manderscheid to Hon. Joanne H. Turner (Mar. 25, 2016) (on file with the Minnesota Tax Court). Guardian asked the court to consider the unadjusted USDA data, agreeing that Mr. Torkelson's use of "a more efficient bushel of corn yield at the subject property improperly reduced the amount of external obsolescence suffered by the subject property." Letter

Shenehon's calculation, not that of the Department of Agriculture. According to the Shenehon firm, the average ethanol margin between 2000 and 2007 was \$1.00 per gallon.¹⁴²

(4) Shenehon's higher industry yield did not reflect the performance of the subject property

Guardian contends that the Shenehon firm's use of a higher industry yield of 2.85 gallons per bushel did nothing more than reflect the actual experience of the Janesville facility in 2010 and 2011.¹⁴³ That, too, lacks credibility. According to financial information summarized in the Shenehon report, during 2011 the Janesville facility generated 117,207,742 gallons of ethanol from 42,066,112 bushels of corn, for a yield of 2.786 gallons per bushel—somewhat better than the industry standard of 2.7, but substantially less than Shenehon's claim of 2.85.¹⁴⁴ Only on remand does Guardian concede this point, albeit without revealing the basis (if any) of the Shenehon firm's claimed yields.¹⁴⁵

In short, the record does not support the Shenehon firm's assertion that ethanol margins were forecast to be \$1.00 per gallon, either when this facility was under construction or otherwise.

from Thomas R. Wilhelmy to Hon. Joanne H. Turner (May 13, 2016) (on file with the Minnesota Tax Court). We do not rely on the altered portions of Exhibit 28.

¹⁴² Ex. 22, at 49 (describing \$1.00 per gallon as “average margin of ethanol plants from 2000 to 2007”); Ex. 23A, at E-2 (showing figures of \$.95 and \$1.00 at Dec-07). We are unable to replicate the Shenehon firm's calculation, whether \$.95 or \$1.00 per gallon, of average margin. By our calculation, the average margin between 2000 and 2007, using a 2.85 yield, is \$.901 per gallon. *See* Ex. 28. In any event, we do not rely on the Shenehon firm's figure.

¹⁴³ *See* Tr. 531 (Mr. Torkelson testifying “the subject is 2.85, and that was what was used was the subject's actual blending”).

¹⁴⁴ *See* Ex. 22, at 119. The Shenehon firm does not report the number of bushels of corn processed during the preceding fiscal year (2010), making it impossible to calculate the facility's crush margin for that year, or an average crush margin for fiscal years 2010 and 2011 combined. *See id.*

¹⁴⁵ Pet'r's Suppl. Br. Regarding Economic Obsolescence 14 n.10.

The record therefore does not support a one-third reduction in replacement cost for economic obsolescence, even under Guardian's theory.

F. FINDINGS WITH RESPECT TO ECONOMIC OBSOLESCENCE AND FINAL CONCLUSIONS OF VALUE

Assuming (without deciding) for purposes of this case only that the supreme court's instructions to us on remand restrict our approach to economic obsolescence to one of the two taken by the parties' respective appraisers, we adopt the approach taken by the Shenehon firm. We have rejected the County's approach, for all the reasons we have given. Mr. Dodd's calculations cannot be corrected using the information in our record and, indeed, may not be correctable at all. However, we find that the Shenehon firm's calculations *can* be corrected using information in our record and, as our findings with respect to economic obsolescence, we make those corrections.

As we have explained, the Shenehon firm asserted that ethanol margins were forecast to be \$1.00 per gallon based on a hypothetical comparison of ethanol and corn prices between 2000 and 2007.¹⁴⁶ Because there are no forecasts of ethanol margins, we rely instead on actual margins and, in particular, on the actual difference between 2000 and 2007 between the price of ethanol per gallon and the cost of the corn required to produce it.¹⁴⁷ This is the same time period on which the Shenehon firm relied for its "forecast" margin of \$1.00 per gallon.¹⁴⁸ We recalculate actual margins between 2000 and 2007 using the industry standard of 2.7 gallons of ethanol per bushel,

¹⁴⁶ Ex. 22, at 82; *see* Ex. 23A, at E-2 (calculating average margin of \$1.00 between January 2000 and December 2007).

¹⁴⁷ *See* Ex. 28.

¹⁴⁸ *See* Ex. 22, at 49 (calculating average margin of \$1.00 between January 2000 and December 2007).

rather than Shenehon's overstated 2.85 gallons per bushel, arriving at an average for the period of \$0.857 per gallon.¹⁴⁹ In other words, and using Guardian's approach, we find that market participants would have "forecast" ethanol margins to be \$0.857 per gallon in the years in question.

We then compare that figure to \$.666 per gallon—this property's actual margin, according to the Shenehon firm¹⁵⁰—and conclude that the difference represents the economic obsolescence due to unfavorable conditions for both corn and ethanol during 2009, 2010, and 2011, as compared to historical trends. Accordingly, we find that the subject property suffered from economic obsolescence of approximately 22% ($1 - \$.666/\$.857$) as of each valuation date. We therefore arrive at final market values (rounded to the nearest hundred) of \$33,866,400 as of January 2, 2009; \$29,544,600 as of January 2, 2010; and \$29,725,300 as of January 2, 2011.

These figures are higher than Guardian's experts' conclusions,¹⁵¹ but the difference is largely driven by differences in replacement cost (new), which the supreme court has previously affirmed. We deduct less for economic obsolescence than Guardian's experts, specifically because the Shenehon firm's calculation relied on inflated industry averages. Our value conclusions are higher than the County's expert's conclusions for January 2009 (the difference driven largely by his higher reduction for economic obsolescence), but only marginally higher than the County's

¹⁴⁹ See Ex. 28.

¹⁵⁰ Ex. 22, at 84.

¹⁵¹ The Shenehon firm concluded that the value of the subject property was \$20,320,000 as of January 2, 2009; \$20,120,000 as of January 2, 2010; and \$19,690,000 as of January 2, 2011. Ex. 22, at 128.

conclusion for January 2010 and lower than the County's conclusion for January 2011, again largely because of the difference in the reduction for economic obsolescence.¹⁵²

The following table summarizes our previous determination of the replacement cost (new) of the real property as affirmed by the supreme court; our findings with respect to depreciation (including economic obsolescence); and our determinations of market value as of January 2, 2009, 2010, and 2011:

	2009	2010	2011
Total replacement cost: buildings and silos	\$19,077,355	\$17,608,170	\$18,109,870
Total replacement cost: tanks and other improvements	\$ 13,286,875	\$12,343,510	\$13,286,875
Total replacement cost: other improvements	\$ 7,143,845	\$ 7,592,240	\$ 7,946,310
Total replacement cost: buildings, tanks, and other improvements	\$ 39,508,075	\$37,543,920	\$39,343,055
Indirect costs and entrepreneurial profit (6%)¹⁵³	\$ 2,370,485	--	--
Subtotal	\$ 41,878,560	\$37,543,920	\$39,343,055
Less physical deterioration	--	(\$940,744)	(\$2,234,122)
Less functional obsolescence	--	--	--
Less economic obsolescence (22%)	(\$9,213,283)	(\$8,259,662)	(\$8,655,472)
Add land value	\$1,201,135	\$1,201,135	\$1,271,790
TOTAL MARKET VALUE	\$ 33,866,412	\$29,544,648	\$29,725,251

J.H.T.

¹⁵² Mr. Dodd concluded that the value of the subject property was \$26,590,000 as of January 2, 2009; \$29,100,000 as of January 2, 2010; and \$33,990,000 as of January 2, 2011. Ex. GG-2.

¹⁵³ As discussed above, our inadvertent failure to include these costs in 2010 and 2011 was waived on appeal from our 2014 findings of fact.