8.1 General
Almost every highway has some utilities located within or adjacent to the highway right of way. A highway improvement project frequently requires some of these facilities to be relocated. When new right of way is purchased, a utility may be eligible for compensation for the relocation of some of their facilities. (See Chapter 11, Utility Reimbursement Process, for additional information on compensation.)

The right of way (R/W) plat is the first complete drawing showing proposed alignment and proposed right of way, and giving stationing that can be related to the cross sections. The completed plat and plotted cross sections provide the basic information the utility company engineers need to start identifying conflicts, and determining where they may be able to put relocated or replacement facilities.

Planners are required to plan excavations to avoid the extent possible interference with utility facilities in or near the excavation area. See Wis. Stat. s.182.0175 in Attachment 1.2.4. If the existing facilities are not properly located and identified, the planner cannot adequately fulfill this obligation. Utility facilities must be field located. Reliance on utility company facility maps (hard copy or electronic) for location of utilities is not acceptable.

8.2 Establishing New Right of Way Limits
Determining the right of way required for an improvement project is not always easy. Many points of view come into play, and the final design is not yet established at the time the right of way plat is completed. With this in mind, the Designer is urged to set the new right of way limits conservatively so that later design changes are easily accommodated. Also, the needs of utility companies should be taken into consideration during this process. Attachment 8.2.1, a memo written in response to several problems encountered in former District #1, is included to give the Designer insight into some of the items that should be considered in establishing needed right of way. The information in this memo is relevant to all Regions. The basic points of this memo can be summarized as:

1. Be sure the right of way is wide enough to provide flexibility in final design.
2. Consider constructability and future maintenance.
3. Consider the relocation needs of the utility facilities.
4. Streamline the right of way to minimize the number of jogs.
5. Provide room outside of the slope intercepts to accommodate the above.
6. On rural projects, the suggested minimum distance between the slope intercept and the right of way line is 10 feet. (FDM Procedure 12-15-1) On urban projects 10 feet may be excessive, and 5 feet may be more desirable. Less than 5 feet between the slope intercept and the right of way line will usually require Temporary Interests (TI's) in order to build the project.

8.3 Showing Utilities on the Right of Way Plat
All utility facility location information shall conform to Quality Level B or Quality Level A as defined in the “American Society of Civil Engineers (ASCE) Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, CI/ASCE 38-02.” In summary, Quality Level B means that all utility location information must be field located. Quality Level A means that horizontal and vertical location as well as facility size and type information must be provided by exposing the structure and collecting the data. See the ASCE Standard Guideline document for additional detailed information on data quality levels.

All utility information within the area covered by the right of way plat should be shown on the plat. This includes both physical facilities and land rights information. The Designer may use a little discretion in this area. The intent is to show the utility system affected by the project. For example, facilities on a street parallel to the project need not be shown, unless they are connected to facilities affected by the project. See the section later in this chapter titled “Transportation Project Plats (Recorded Right of Way Plats)” for additional information on what utility facilities to show on recorded plats.

For non-recorded plats, all utility facilities within existing or proposed right of way, both underground and surface, shall be shown on the plat. Overhead lines are usually not shown, but the poles supporting them (which are surface facilities) are shown. The plat shall also indicate the ownership of the utility facility. Note that recorded plats are only required to show utility facilities where a portion of the facility is compensable, but they may show all utility facilities. Utilities are to be marked using the standard symbols as shown in Attachment 8.3.1 and in FDM Procedure 15-5-30.
The intended purpose of a plat is for the purchase of land interests. As such it is not a construction document. Any construction activity should be done using the plan sheets that were developed for that purpose. However, since the development of the plat sheet is closely tied to the development of the plan sheets, the following discussion on “caution” symbols is included in this section. It should be noted that “caution” symbols are not required on plats because plats are not construction documents, but some designers may find it more efficient to include the “caution” symbols on plat sheets rather than adding them to the plan sheets that are created later. Showing the “caution” symbols is acceptable.

There are two caution symbols that are to be used on plans and plats. See Attachment 8.3.1 or FDM Procedure 15-5-30 Attachment 30.2. The Combustible Fluids Caution symbol should be used only for pipelines carrying combustible or explosive fluids. See FDM Procedure 15-1-35. A blowup of a pipeline or gas main would cause a widespread catastrophe.

High voltage power lines would cause serious injury to any individuals in direct contact with the lines, but the nature of the damage is limited to the immediate area. Therefore a High Voltage Caution symbol is warranted. The symbol is appropriate to show on electric transmission lines that are 69 kV and higher.

If a pole or pedestal has been accurately determined to lie either inside or outside of the new right of way, its position on the plat should be slightly exaggerated to clearly demonstrate whether or not the facility is compensable.

NOTE: The center of the pole or pedestal is used to determine compensability.

The Designer should make sure that the locations of underground facilities match between plat sheets.

On each sheet of the plat, the ownership of the utility facilities shown must be identified. It is not unusual for utilities to change their names due to corporate reorganization, mergers, federal rulings, etc. The right of way plat should show the most current name of the utility, if it is known. However, it is acceptable to show the name of the company as shown on the easement documents.

All applicable land interests of utilities shall be shown on the right of way plat. This includes land owned by the utility as well as all easements, conveyance of rights documents from past highway projects, or use agreements obtained by the utility company.

**General public utility easements** established as part of land platting and certified surveys shall be shown and identified. See Attachment 8.3.2. However, only when easements are located within new right of way and are actually occupied by a utility does a platted general public utility easement become a compensable utility parcel.

As mentioned above, utility land interests (easements, conveyance of rights documents, etc.) need to be shown on the plat. See also FDM Procedure 12-1-5. However, because some utility easements are written in very general terms and cover an entire section or quarter-quarter, the plat only needs to reference the source document (by the recording information such as volume and page, document number, etc.) that applies to the utility easement or conveyance of rights document. The notation should also include which parcels the easement applies to. Where specific physical boundaries of strip easements and use agreements can be identified, they may be shown as such. Easements shall be identified as shown in the examples in Attachments 8.3.2, 8.3.3, 8.3.4, and Attachment 8.3.5.

**Easements** owned by a utility fall into two categories, occupied and unoccupied. An occupied easement is one in which a utility has some type of facility. An unoccupied easement is one that is owned by a utility but is currently unused, meaning that there is no utility facility in the easement area. Both types of easements shall be shown on the plat. The recording information of the easement, along with what parcels are affected by the easement has to be shown on the plat. See Attachment 8.3.5. You do not need to graphically show the limits of the easement, but in some cases that can be helpful and it is permissible to show the limits of the easement. Unoccupied easements more than 100 feet away from the new right of way need not be shown on the plat. Any release of rights document that is created for the highway improvement project needs to include all easements, both occupied and unoccupied.

If a utility with compensable facilities also has land (for example, at a company-owned sub-station) which WisDOT will need to purchase for new right of way, the real estate parcel and the utility parcel are different and must be
assigned different parcel numbers. See Attachments 8.3.3 and 8.3.6.

**Utility facilities located in proposed Temporary Limited Easements or Permanent Limited Easements** may be compensable, and should be shown as a parcel on the plat where relocation is required. A Temporary Construction Easement, Form DT2216 -Traditional Right of Way Plat or Form DT2217-Transportation Project Plat, is needed to allow construction to take place in this area. This Temporary Construction Easement also serves as the vehicle to allow payment because it is a temporary release of a land right.

Sometimes utilities legally occupy private land via **unrecorded easements, verbal agreements, or prescriptive rights**. In this case there will not be any recorded documents and you should show the compensable utility facility without any reference to recording information. See Parcels 46 and 47 in Attachment 8.3.7 for an example. Chapter 11 of this guide has more information regarding prescriptive rights.

When utilities sign a conveyance of rights document for a highway project they retain the right to future compensation for utility relocations caused by an improvement project. When there is an existing **conveyance of rights document from a previous project**, the utility facility is compensable and must be shown as such on the right of way plat. See Attachment 8.3.8.

Though not always necessary, a separate Utility Plan may be prepared to avoid showing all utilities on a cluttered right of way plat. However, the compensable utilities located in the new acquisition areas must still be shown on the right of way plat. The separate Utility Plan must contain the reference line, existing and proposed right of way lines, all existing utilities, slope intercepts, utility easements, and the proposed work. This separate Utility Plan will not be a part of the right of way plat, but it must be completed at the same time as the plat if it is to be useful to the utilities. Please consult with the Region Utility Unit if you are considering developing a Utility Plan.

**8.4 Trans 233 Setbacks**

Trans 233 affects the compensation of utility facilities in the highway setback area on land divisions created after February 1, 1999. The location of the setback line, the date of the creation of the land division, and the date of the placement of the utility facilities determine whether the utility facilities between the setback line and the right of way line are compensable. Therefore it is important to indicate the land division recording information on the right of way plat. For land divisions created after February 1, 1999, the land division document should be consulted to determine whether the utility facilities in the setback area should be shown as compensable or not. Attachments 8.4.1 and 8.4.2 are examples of a Certified Survey Map (CSM) and a subdivision showing the required information.

For a more thorough discussion of Ch. Trans 233 Wis. Adm. Code and its impact on compensation of utility facilities, see UC Guide Chapter 22, TRANS 233.

**8.5 Compensable Utilities**

When a utility has facilities in land rights within the proposed right of way, the relocation of these facilities and the release of the land rights are compensable. Compensable means that WisDOT is required to offer to pay the relocation costs of the facilities, and must obtain the land rights from the utility company. If all of the utility facilities are within the existing right of way, WisDOT does not pay the utility to relocate its facilities unless there is a prior conveyance of rights from a previous project. An example of compensable utility facilities on a right of way plat is shown in Attachment 8.3.2 and Attachment 8.3.7.

For utility poles, the location of the center of the pole is used to determine compensability. If the center of a pole is located on the right of way line or within the existing right of way, the pole is not considered compensable. There are times when exceptions are made for very large steel poles or structures, such as transmission towers. The compensability of large structures may be prorated based on the percentage of the structure on private lands. Other types of utility facilities other than poles or large structures should be treated in a similar manner. The center of the facility should be used to determine compensability or, if that is too difficult to determine, a prorated percentage based on the area inside the existing right of way versus the area outside of the existing right of way can be used. See Attachment 8.5.1. If any part of a utility facility is compensable, it should be shown on the plat as compensable. Check with the Region Utility Unit if you are uncertain as to whether a facility should be shown as compensable.

Anchors and guy poles are compensable only if the primary pole is compensable.
Service drops are not usually considered compensable. Service drops do not usually have an easement associated with them, so there is no land right to justify payment. (We generally do not consider prescriptive rights apply to a service drop.) There are exceptions to this. If there is an easement associated with the service drop, the service drop would be compensable. Also, large service drops serving industries, public buildings such as schools, and other similar facilities would be considered compensable. These services more closely resemble a distribution line than a service connection. It is important to note that service drops are never excluded from an estimate. In general, the ratio of payment is based on the ratio of existing utility distribution facility on private land versus public land. In the case of a sewer main that is 50% on private land, 50% of the total invoice, including service drops, would be compensable. In general, if none of the main is on private land, none of the work is considered compensable, even if some service connection work requires replacement of the service drop that is outside of the right of way.

In areas where a company holds easement rights that fall within new right of way, but has no actual facilities, a parcel must be shown.

Facilities or easements that fall within a Temporary Interest (Temporary Limited Easement or Construction Permit) or a Permanent Limited Easement (PLE) are compensable and should be identified as parcels on the plat.

The utility facilities and land rights within the new right of way shall be marked and identified with the owner's name and the parcel number. The utility companies and the parcel numbers shall be shown on the Schedule of Interests portion of the plat. The Interest Required is a "Release of Rights." A sample Schedule of Interests is shown in Attachment 8.3.6. In addition to the information shown in Attachment 8.3.6, it is sometimes helpful to include the last two digits of the Utility Project ID on the Schedule of Interest, directly after the utility company name. This is particularly helpful when there are multiple plats for a project and where a utility company may have more than one utility agreement. Again, the Utility Project ID is optional.

It is possible for a utility facility within existing highway right of way to be compensable. This would occur when a utility has previously given WisDOT a release of rights for an earlier project. For example, in 1954 WisDOT purchased new right of way for STH 23 in Iowa County. GTE North gave WisDOT a release of rights at that time, but did not relocate their facilities. In 1992, WisDOT again planned to reconstruct STH 23. GTE North was eligible for compensation on both the facilities in the right of way purchased in 1992 and the facilities in the right of way purchased in 1954. This was discovered by reading the language in the Conveyance of Rights from 1954, which was found in the title searches for the project. See Attachment 8.3.8.

An unusual situation occurs where lands adjacent to a highway have been dedicated for highway purposes. Although such lands will not appear on the plat as new right of way, it is possible that a utility located within the dedicated lands would be a compensable parcel if the utility's occupation of the lands pre-dates the dedication.

A related situation is where the utility has facilities in a land division “Highway Setback” area. It is possible that the facilities in the setback area are not compensable even though they are in a utility easement. This is only true for facilities placed after February 1, 1999. Any facilities placed prior to that date would be compensable. See Chapter 22, Trans 233, for additional information.

On projects involving a designated freeway (per Wis. Stats. 84.295) municipally owned utilities are 90% compensable when located within existing right of way. These facilities should be shown similar to compensable utility parcels, but they would be labeled as "Utility Agreement 101" or simply "UA 101" rather than parcel 101. They are not exactly a parcel, but they are compensable and need to be shown on the plat. They would be labeled on the applicable plat sheets and listed in the Schedule of Interests. When numbering the Utility Agreements start with “UA 101.” If there are more than 100 parcels, but less than 200, start with “UA 201,” and so on. Facilities in new right of way are still a utility parcel and would be 100% compensable. It is quite likely that there will be two agreements required, one for the 90% compensable work and one for the 100% compensable work. Two state statutes are involved and two different agreement forms are required.

8.6 Non-Compensable Utilities
Utility facilities that are within the existing right of way are non-compensable unless a conveyance of rights was obtained on an earlier project. Attachment 8.6.1 shows non-compensable utilities on a right of way plat.
8.7 Preliminary Right of Way Plat
The base plat, which shows all the existing land information, should be submitted to the Region Utility Unit for their review prior to placing new right of way information on the plat. The Utility Unit will verify that all existing information is shown as required. This may save time and rework in later reviews.

A print of the preliminary right of way plat must be given to the Utility Unit for their review at least one month prior to the completion of the final plat. The Utility Unit will check to see that the utility facilities and land rights are shown properly. Changes and corrections that must be made will be submitted to the Designer prior to the completion of the right of way plat that is submitted with the relocation order.

8.8 Signed Right of Way Plat
A copy of the signed right of way plat, and all revisions that may affect utilities, must be given to the Utility Unit. The designer must provide the Utility Unit with a copy of the plat when it is first signed, and again whenever it is revised. At the same time, they will also need a set of plan and profile pages, mainline and side road cross-sections, as well as typical sections and intersection details and all information necessary to design the utility relocations required. The Designer must provide this information. For in-house projects additional sets of all of the above will be requested by the Utility Unit to send to all of the affected utilities. The designer is responsible for furnishing the prints to the Utility Unit. On consultant projects refer to the contract to determine who is responsible for sending plats and plans to the utilities.

8.9 Transportation Project Plats (Recorded Right of Way Plats)
A Transportation Project Plat (TPP) is a highway right of way plat that is recorded at the County Register of Deeds Office. It must contain the utility easement and all utility-related land interest information. They must also show existing utility facilities in the acquisition area and all other compensable utility facilities, such as facilities occupying areas where a Conveyance of Rights in Land document is in effect from a previous project.

When any part of a utility facility is compensable, all of that utility's facilities shall be shown on the TPP. This includes facilities in the new acquisition area, in the existing right of way, and in areas adjacent to the right of way. In most cases, sewer and water facilities are not compensable and will not be shown on plats. The exception is when the sewer or water utility owns an easement or on projects where a highway is designated as a freeway by Wis. Stat. s.84.295.

The timing of the recording of TPP’s is generally later in the project development process, usually after highway project plans have been sent to the utility companies. When the TPP is not recorded by the time the highway plans are sent to utility companies, this creates problems for utility coordination. The Office of General Counsel has issued a legal opinion that states we can send plans and agreement forms to utility companies prior to the relocation order date or recording date. See Attachment 8.9.1. The utility company can also sign the agreement forms and return them to WisDOT prior to the relocation order date. However, as a matter of policy and to be sure we are in compliance with Wis. Stat. s.4.09, WisDOT will not sign the agreements until after the TPP has been recorded. If the TPP is not recorded by the time the utility returns the agreements to WisDOT, the highway improvement project will be delayed. Also, the release of rights documents, either the Conveyance of Rights in Land or the Quit Claim Deed, must reference the recorded plat in the legal description. Therefore, the utility coordinator cannot send out the release of rights document until after the TPP is recorded. If the TPP is not recorded at the time the highway plans are sent to the utilities, it is recommended that the utility coordinator send the release of rights document to the utility company with the approved utility agreement. A sample cover letter for sending the approved utility agreement and the release of rights document is shown in Attachment 11.15.2, of Chapter 11, “Utility Reimbursement Process,” of this Guide.

When a TPP is recorded, the Register of Deeds will create an index for the TPP and all subsequently recorded documents are indexed to the TPP. Our release documents need to be indexed to the TPP. So, the legal description needs to contain a reference to the TPP and that means that the TPP has to be recorded prior to creating the release document.

The current method of operation does not require the recording of the TPP until just shortly before real estate is purchased, which is usually going to be after the utility coordinator has sent out the Project Plans packet of information to the utilities. In the past we included the release document in the Project Plans packet. In many
cases we can no longer do that because the TPP won’t be recorded at that time. Instead, the new process will have the release document sent to the utility company at the time the approved utility agreement is sent to the utility company. It is anticipated that the TPP will be recorded by this time and the appropriate legal description, including the recording information of the TPP, can be included in the release document. If for some reason the TPP is not recorded by the time the Utility Agreement is sent back to the utility company, the Region has a problem and the project letting should probably be rescheduled.

The agreement states “For and in consideration of the conveyance by separate instrument to the State of Wisconsin of certain lands or interests or rights in said lands in which the Company holds a real property interest, the Department will pay...,” which means that the agreement is not valid until we receive the release document. We cannot pay any invoices until the release document is received and recorded. By signing the agreement the utility company has agreed to provide the release document. The PS&E can be submitted prior to the recording of the release document, and the project can be let prior to the recording, however, we cannot pay any invoices until after the release document is recorded.

If plat revisions are needed, the TPP must be corrected in one of two different ways, depending on the nature of the required revisions. If the recorded plat is missing a utility land interest area, or the utility is not listed as a parcel, the plat must be amended. This means the plat must be revised (amended) and a new plat recorded. An example of missing a utility land interest area is where we show the utility facility inside the right of way with no utility easement. Then we discover that the utility facility is really outside of the right of way and it is thus compensable. We would need to revise the plat to show the facility outside of the right of way and label it as a parcel. If there were a recorded easement that we originally missed, we would have to add that information also. This revised plat would then be recorded at the Register of Deeds Office. A new release of rights document would have to be recorded also, unless the error was detected before the release of rights document was recorded.

If the plat revision is more of a clerical nature, such as adding existing easement recording information that we missed in the original TPP, that correction can be dealt with in the legal description in the release of rights document. This assumes that we had correctly shown the utility as compensable on the original TPP, and it was labeled as a parcel. So, the only thing that needs correcting is the existing easement information. Revise the legal description to include all of the correct information and return the release of rights document to the utility for signature before recording it. This method can also be used to correct the name of a utility company or to correct text errors on the TPP.

8.10 TPP and Traditional Plat on the Same Project
On projects where there are a lot of temporary limited easements (TLEs), it is possible that the Project Manager may decide to have both a traditional plat and a TPP. For example, a project is 10 pages long and there is fee acquisition only at two intersections, which are on two separate pages. The remaining 8 pages are for TLEs. Since TLEs are temporary interests by definition, there is no point in recording those 8 pages. They would just be unnecessary recorded documents at the Register of Deeds Office and they could confuse someone in the future. So, to avoid cluttering up the Register of Deeds files with worthless documents, the Project Manager will use a TPP for the two pages where fee acquisitions are needed and a traditional plat to show the TLEs. These plats will have separate right of way project ID numbers and different sets of parcel numbers (although the plat preparer could use the same utility parcel numbers on the two plats for each utility company if they choose to).

The utility coordinator still needs to acquire the land interests from the utility companies. In order to do that, a release of rights document is needed for the TPPs, and a Temporary Construction Easement is needed for the traditional plat areas. This assumes that no TLEs will be shown on the TPP. Different right of way project ID numbers will be used on the two documents. The release of rights document will have a legal description referencing the TPP right of way project ID and the Temporary Construction Easement will have a legal description referencing the traditional plat right of way project ID. The same Utility Project ID number will be used on both documents. The utility agreement will cover the work necessary for the entire project, so only one Utility Project ID will be needed.

8.11 Cooperative Acquisition
Wis. Stat. s. 84.093 allows WisDOT to enter into agreements with utility companies for the acquisition, development and maintenance of right of way. This process is optional and will be decided on a project basis. If cooperative
acquisition is used on a project, additional information regarding the land interests needed by the utility company must be shown on the plat. Wis. Stat. s. 84.093, cooperative acquisition of rights-of-way, is Attachment 8.11.1.

The decision to use cooperative acquisition should be made jointly by the Region design, real estate, plat development and utility unit personnel. The decision to use cooperative acquisition should be made early in the design process so that the appropriate agreements can be developed and the additional information that is required on the plat can be added during the initial plat development process.

To date, cooperative acquisition has not been used on any projects, primarily because of many questions that have arisen regarding how it can be implemented. Please consult with the Office of General Counsel (OGC) if cooperative acquisition is being considered. Additional guidance is provided in Attachment 8.11.2.
CORRESPONDENCE MEMORANDUM

DATE: March 1, 1991

TO: District #1 Designers

FROM: Ernest J. Peterson, District Utilities Engineer
(The basic concepts of this memo were approved by the District Technical Committee)

District #1 Guidelines for Establishing New R/W Limits

It has been District policy to minimize the R/W taken for an improvement project. In the past there has been pressure from farmers, environmentalists and other special interest groups to minimize the taking of farmland, wetland, woodland, and residential land. In response to this pressure, the District has implemented a policy that minimized R/W acquisition.

There are places where we must minimize highway R/W. For example, near historic buildings, parklands, and other 4F lands. However, I feel that we sometimes create problems for ourselves when we restrict the R/W.

There have been a number of projects where the slope intercept is approximately one foot from the R/W line. The R/W lines tend to zig-zag constantly throughout the project. This method of establishing R/W may have minimized the taking of land, but it has also caused problems during final design and construction. We create problems for ourselves when we are too conservative in establishing the initial R/W.

The R/W limits are determined during the preliminary design. During final design, it is not uncommon to change the grade in response to concerns of adjacent property owners, or to improve safety, or in response to other information that was not known at the time of the preliminary design. However, when the R/W is too restrictive, the designer loses the flexibility to change the grade without affecting R/W needs. This is sometimes compensated for by steepening slopes, or building curb and gutter or retaining walls. These alternatives compromise the safety of the roadway, even if they are acceptable design practices. The designer should put more emphasis on "streamlining" slope intercepts during the preliminary design so that later changes can be more easily accommodated.

We must also consider the accuracy of the data the designer has to work with. Technical Services acknowledges that cross sections can easily be off by 1.25 feet horizontally, and 0.2 to 0.3 foot vertically on PX mapping. The combination of the vertical and horizontal error magnifies the difference between cross section data and actual field conditions. If the original ground is wrong by one foot horizontally, that adds four feet to the slope intercept for a 4:1 slope. Add to this any vertical error, and the end result can be quite dramatic. When the R/W is established at one foot from the slope intercept, a one foot error on the cross sections puts the slope intercept out onto private land. This scenario is discovered during construction, and slopes are steepened. Again, the safety of the roadway is compromised.

The designer must also realize that there is other information that is not apparent until construction
begins. Aerial mapping cannot pick up all of the information that affects the proper design and construction of the roadway. While a field survey is always made to supplement the PX mapping, some information can go undetected by even the most experienced survey crew. Sometimes old culvert pipes are uncovered during construction that are not shown on the plan. The pipe may be almost full, and not noticeable when driving on the road, but it may drain a low spot that was not picked up by the mapping and cross sections. There are other features that may be uncovered during construction that can cause changes to the design during construction.

Another aspect the designer should take into consideration is constructability.

- Contractors do not build slopes with a sharp angle point at the slope intercept. There is a rounding effect that occurs. The actual construction limits are extended by this rounding, although this is not shown on the plan this way.
- Slope stakes should not have to be placed on private property.
- Top soil storage, and room for equipment to operate should be given some thought during the design process.
- Rock cut information on plans is not always the same as what is found in the field during construction. Weathered rock, or rock at a different elevation than shown on the plan, can cause problems during construction which require changes to the cross sections.

The ability to maintain the highway after construction should also impact on the determination of R/W limits. Continually zigzagging the R/W creates problems in knowing where the R/W limits are. Tapers become obliterated by the loss of R/W marker posts at angle points. After construction is complete, stationing is not usually readily available in the field. While the Total Station equipment can simplify this task, this equipment is not readily available to Maintenance personnel and others who need to verify R/W locations. Accurate restoration of R/W marker posts becomes difficult without this equipment. With sign control and prevention of encroachments being given high priority by the FHWA, it is imperative to have easily recognizable R/W limits during field surveillance.

Once construction is complete, the District Maintenance Section is responsible for the repair of erosion and drainage problems. This becomes extremely difficult where the slope intercepts are at or near the R/W line. This is especially true on fenced highways. There should be a minimum of 15 feet between the slope intercept and the R/W line to allow equipment operation on the highway R/W when the need arises. This would prevent the disturbance of highway traffic, or the need to obtain approval from the adjacent property owner.

Now, let's examine the reasons for restricting the R/W:

Loss of farmland. When we improve an existing highway adjacent to farmland, there is a loss of productive farmland. However, farmers do not plow their fields or plant crops in a zigzag pattern. They prefer long straight stretches. Therefore, when our R/W is not uniform, we may be taking less farmland, but the actual loss of productive farmland is not significantly less. The farmer is not able to utilize the odd shaped land, and if he/she does, they are probably encroaching on the R/W in order to do so.

Loss of woodland. There is definitely a loss of woodlands. While trees are a renewable resource, it takes many years for the trees to grow to maturity. However, the loss of woodland
habitat is somewhat offset by the gain in habitat suitable for small rodents and predatory birds and animals. Reduced mowing of roadsides has increased wildlife habitat in some areas. An increased interest in the planting of native grasses and wildflowers in suitable areas of the R/W can offset some of the loss of woodland. We are replacing a wooded area with an area that is suitable for other types of animals. (Many environmentalists do not accept this argument, but studies have shown this to be true.) Also, not all trees within the R/W are removed. We no longer clear cut the R/W. Only the vegetation that conflicts with the roadway construction or the clear zone is removed.

Loss of wetland. The effect on wetland is similar to that of the woodland. Not all wetland within the R/W is lost to roadway construction, and some of it is replaced by a different type of wildlife habitat. However, the EPA does not give credit for wetland that remains wetland within the R/W limits. Once we purchase wetland, in the eyes of the EPA, it is no longer wetland.

Loss of residential land. In many cases, the effect is merely the loss of taxes to the local municipality. The area from the slope intercept to the R/W line can still be maintained by the property owner, and is effectively an extension of the lawn. When slopes are relatively flat, the effective lawn extends to the ditch bottom, or the shoulder point.

DOT is constantly being asked to be more responsive to the public. The demand for recreation trails, noise barriers, and landscaping, is increasing. These all require space on the R/W. When designing roadways today, we must acknowledge the possibility of being required to provide these in the future, as well as items we aren't even aware of at this time.

Lastly, providing a wider and more uniform R/W will make it easier to accommodate utilities on the R/W. The utility must remain outside of the clear zone if they stay within the R/W. They may occupy private land by easements, but easements are becoming harder to get. We can blindly say "that is their problem", but it becomes our problem when they hold up construction on a project. We can also force them to move, but when their customers must go without service because DOT forced them off the R/W, we become the villain. Besides, we are both servicing the public, and the bottom line is that the taxpayers and the rate payers are the ones who foot the bill. We must look at what is in the best public interest, rather than become territorial about who has the legal right to occupy the R/W and under what conditions.

The DOT has a policy that the utility must be as close to the R/W line as possible. Every time there is an angle in the R/W there is consequently an angle in the pole line of the utility. An angle point requires guy wires and anchors, which are another potential traffic hazard.

While the days of a uniform R/W width from one end of the project to the other may be over, we can still make an effort to establish a wider and more uniform R/W on our improvement projects.

**SUGGESTION:** We should strive for a minimum of 10 feet outside of the widest slope intercepts, with streamlining to minimize the angle points in the R/W line.

I would like to mention a few projects that I am aware of where problems were compounded by the narrow R/W. I do not mean to pick on these projects, these are just some that I am aware of.
Newville Bridge – R/W was too tight to begin with, and then we raised the grade after the project was let.

* Now ditches are on private property
* One property owner wishes he would have been bought out (I have heard this comment on many projects where the designer took great pains to avoid taking the building, only to hear after construction was underway, that the owner would rather have been bought out, especially when they must look at a large fill or retaining wall)
* Could have had a better design had we been willing to spend more money on R/W and relocation costs.

**USH 51 north of STH 19**

* V-shaped ditches, rather than the preferred 6:1 sloped ditches
* Steep backslopes and inslopes
* Erosion problems

**USH 51 - Pierstorff - CTH "CV"**

* R/W one foot outside of the clear zone
* We purchased additional R/W through condemnation during construction.

**STH 78 - Mount Horeb to Black Earth**

* Rock cuts in some areas were not able to hold the steep design slopes. The cross sections in these areas had to be revised during construction. Stone walls replaced the rock cuts where possible, and some slope intercepts are at or outside of the R/W.

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**FIG01.DOC**
UTILITY SYMBOLS

UNDERGROUND

COLOR     SYMBOL     UTILITY
---       ---       ----
ORANGE    TV        CABLE TELEVISION
ORANGE    C         COMMUNICATION
ORANGE    FO        FIBER OPTIC
ORANGE    T         TELEPHONE
RED       E         ELECTRIC
RED       OH        OVERHEAD LINES
YELLOW    G         GAS
GREEN     SAN       SANITARY SEWER
GREEN     SS        STORM SEWER
GREEN     SSS       COMBINED SEWER
BLUE      W         WATER

TOPOGRAPHIC

CONTROL BOX
HYDRANT
LIGHT POLE
MANHOLE
POLE
COMMUNICATION TOWER
TOWER
VALVE
CABLE MARKER
COMPENSABLE NON-COMPENSABLE

POWER POLE
TELEPHONE POLE
UTILITY PEDESTAL
Compensable – center of pole in acquisition area

Noncompensable – center of pole is on the existing r/w line

4-legged tower
3 legs in new r/w, one leg in existing r/w
75% compensable

Large utility facility
60% in new r/w
60% compensable
EXAMPLE SHOWING A UTILITY LAND PARCEL (3), AND A FACILITIES PARCEL (46)
EXAMPLE SHOWING PUBLIC UTILITY EASEMENT
**OCCUPIED EASEMENTS**

**NONCOMPENSABLE**

**COMPENSABLE**

**UNOCCUPIED EASEMENTS**

**NONCOMPENSABLE**

**COMPENSABLE**

**EXAMPLE SHOWING NOTATIONS FOR EASEMENTS**
## Example of a Utility Land Parcel and a Utility Facilities Parcel

### (Graphics Enhanced for Clarity in This Example)
EXAMPLE SHOWING COMPENSABLE UTILITY FACILITIES
(NO RECORDED EASEMENTS)
EXAMPLE SHOWING CONVEYANCE OF RIGHTS FROM PREVIOUS PROJECT
LEGEND: Access Control by Previous Documents

EXAMPLE SHOWING A CERTIFIED SURVEY MAP
Noncompensable - center of pole inside existing r/w

Compensable – center of pole in acquisition area

Noncompensable – center of pole is on the existing r/w line

4-legged tower
3 legs in new r/w, one leg in existing r/w
75% compensable

Large utility facility
60 % in new r/w
60% compensable

Attachment 8.5.1: Compensable Utility Facilities
EXAMPLE SHOWING NON-COMPENSABLE UTILITIES
SENDING AGREEMENTS PRIOR TO RELOCATION ORDER

Below is a Legal Opinion by Fred Wisner on the ability of WisDOT to send plats, plans and utility agreements to the utility companies prior to the signing of the relocation order or the recording of the Transportation Project Plat. This is reprinted from an email message to Ernest Peterson, dated Thursday, July 27, 2006, 12:00 PM.

You ask to what extent can the Department commit to the reasonable costs to a utility for the compensable work for the relocation of its utility facilities required by a state trunk highway improvement, prior to or independent of filing a transportation project plat.

Short Answer: The Department is authorized by Wis. Adm. Code § Trans 220.05(6) and (7) to approve the reasonable costs of compensable work that is included in the utility's work plan. This approval is not conditioned or depended upon the filing of a transportation project plat.

Discussion

Wis. Stat. § 84.063 authorizes a process for facilitating the timely relocation of utility facilities within the right of way of a proposed Department highway improvement. Wis. Adm. Code ch. Trans 220 establishes the administrative procedures for implementing Wis. Stat. § 84.063. The rule includes a step-by-step process with timelines for the Department and utilities to follow to achieve a timely relocation of utility facilities, and covers both noncompensable and compensable work. Compensable work is defined in Wis. Adm. Code § Trans 220.03(3) as follows:

Trans 220.03(3)
(3) "Compensable work" means utility facility alteration or relocation work for which the department will reimburse the utility facility owner under programs or policies of the department, including s. 84.295 (4m), Stats.

Of relevance here for purposes of this discussion, is Wis. Adm. Code § Trans 220.05(6) and (7). These subsections read as follows:

Trans 220.05(6)
(6) For compensable work, in addition to the items specified in sub. (5), the work plan shall include an estimate of cost for utility facilities relocation including appropriate credits for betterments, used life and salvage. An executed conveyance of rights or quitclaim deed to the property occupied by the owner's facilities if one is required by the improvement project may be submitted at this time.

Trans 220.05(7)
(7) The department shall review the work plan to ensure compatibility with permit requirements, the improvement plans and construction schedule, reasonableness of relocation scheme and reasonableness of cost for compensable work. If the work plan submitted by the owner is not compatible or reasonable, the department shall advise the owner by mail as soon as practicable. If sent through regular mail, the department may include a receipt of mailing form. If a receipt of mailing form is sent, the owner shall complete the form and mail it back to the department within 7 calendar days of receipt. The owner shall submit a revised work plan within 30 calendar days of receipt of advice by the department that the work plan is not compatible or reasonable. The department shall review the revised work plan and if the work plan is still not compatible or reasonable, the work plan revision process shall be repeated. When the work plan is compatible and reasonable, the department shall advise the owner by mail of its approval.
It is clear from the aforesaid two subsections that the Department is authorized to approve the reasonableness and compatibility of a utility's work plan for the relocation of its utility facilities required by a state trunk highway improvement, and that such approval covers the reasonable costs of compensable work included as part of the work plan. Nothing in Wis. Stat § 84.063, nor in Wis. Adm. Code ch. Trans 220, makes the approval of the work plan conditioned or depended upon the filing of a transportation project plat.

Conclusion

The Department is authorized by Wis. Adm. Code § Trans 220.05(6) and (7) to approve the reasonable costs of compensable work that is included in the utility's work plan. This approval is not conditioned or depended upon the filing of a transportation project plat.

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Wis. Stat. s. 84.093 Cooperative acquisition of rights–of–way

(1) The department, acting in the public interest, may contract with a public utility, as defined in s. 196.01 (5), or with a rural electric cooperative association, as described in s. 32.02 (10), for the receipt or furnishing of services, or the joint exercise of any power or duty required or authorized by law, relating to the acquisition, development or maintenance of rights–of–way to be used jointly by the department and a public utility or rural electric cooperative association. If parties to a contract under this section have varying powers or duties under the law, each may act under the contract to the extent of its lawful powers and duties. This section shall be interpreted liberally in favor of cooperative action between the department and a public utility or rural electric cooperative association.

(2) Any contract under this section may provide a plan for administration of the function or project, which may include provisions as to proration of the expenses involved, deposit and disbursement of funds appropriated, submission and approval of budgets and formation and letting of contracts.

History: 1997 a. 91; 1999 a. 32 s. 166.
From: Thiel, Jim
Sent: Wednesday, August 08, 2001 4:42 PM
To: Gruender, James; Peterson, Ernest
Cc: Boy, Robert; Larsen, Sheldon; McDonald, Hugh; Polacek, Ronald; Schradle, Gerald; Weber, Edith; Johnson, Liz; CASS, Michael
Subject: Cooperative Acquisition of Right of Way: OGC 98-360

This is in response to four separate, but related legal requests as follows:

- Ernie Peterson's E-Mail of July 8, 1998 asking questions on behalf of the Cooperative Acquisition Committee;
- OGC 90-360, an official legal services request by Jim Gruender dated November 16, 1998, dealing specifically with cooperative acquisition with Alliant Energy on the Janesville Bypass, STH 11 project;
- Ernie Peterson's/David Kipp's E-Mail of December 10, 1998, dealing with cooperative acquisition with WEPCO for the STH 22 project in Shawano County; and,
- Ernie Peterson's E-Mail of January 21, 1999, relating to drafting a generic cooperative acquisition agreement. (Copies are attached.)

I will first address the series of questions in Ernie Peterson's E-Mail of July 8, 1998. The statute involved was created as sec. 84.095, Stats., by 1997 Wis. Act 91, but was renumbered as sec. 84.093, Stats., by the Revisor of Statutes pursuant to sec. 13.93 (1) (b), Stats. It went into effect April 28, 1998. It is a permissive or enabling statute. It does not require WisDOT to participate in cooperative acquisitions with certain utilities; it allows WisDOT to do so under certain conditions and limitations. It reads as follows:

"84.093 Cooperative acquisition of rights-of-way.

(1) The department, acting in the public interest, may contract with a public utility, as defined in s. 198.01 (5), or with a rural electric cooperative association, as described in s. 32.02 (10), for the receipt or furnishing of services, or the joint exercise of any power or duty required or authorized by law, relating to the acquisition, development or maintenance of rights-of-way to be used jointly by the department and a public utility or rural electric cooperative association. If parties to a contract under this section have varying powers or duties under the law, each may act under the contract to the extent of its lawful powers and duties. This section shall be interpreted liberally in favor of cooperative action between the department and a public utility or rural electric cooperative association.

(2) Any contract under this section may provide a plan for administration of the function or project, which may include provisions as to pro rata of the expenses involved, deposit and disbursement of funds appropriated, submission and approval of budgets and formation and letting of contracts." (Emphasis added.)

For convenience, I will repeat each of Ernie Peterson's questions and provide an answer:

**QUESTION 1:** "If WisDOT and a utility enter into an agreement, can utility real estate agents purchase easements and if necessary use our “quick-take” condemnation process?"

**ANSWER 1:** YES, if the WisDOT/utility agreement is properly and carefully written and the transactions are in the public interest. The key will be the terms of the agreement and the facts of the specific situation/project.

This is an unintentionally loaded question. Among issues that would need to be sorted out are (1) who are these real estate “agents” acting as “agents” for WisDOT or the utility or both? (2) who are they requiring the easement for, for what reason, and in whose name is the acquisition? and (3) on whose behalf are they exercising “quick-take” under sec. 32.05, Stats.?

The phrase “utility real estate agent” in everyday conversation most likely refers to an employee of the utility whose major work deals with real estate, but it could also be a contractor hired by a utility to do real estate work for the utility.

However, that person or entity could also become an “agent” of WisDOT pursuant to a cooperative acquisition agreement with the utility. The legal meaning of “agent” is significant and carries with it some potential legal
confusion baggage. “The generally accepted rule is that "one who contracts with an independent contractor is not liable to others for the torts of the independent contractor," Snider v. NSP Co, 81 Wis. 2d 224, 232, 260 N.W.2d 2d 260, 263 (1977). Majorowicz v. Allied Mut. Ins. Co., 212 Wis. 2d 513, 525 (1997). For that reason, among others, state contracts often make it clear and express that the person or entity involved is an “independent contractor.” However, the law actually makes it clear that the terms “independent contractor” and “agent” are not mutually exclusive categories. Both can and do act on the behalf of another. An “agent” can be an “independent contractor.” And an “independent contractor” may or may not be an “agent.” The important distinction for tort liability purposes, protection of governmental immunity statutes, and related laws and even insurance coverage is whether the person is a “servant” rather than an “independent contractor.” For example, if WisDOT engaged a printing company to print some plat sheets and maps and the company’s truck driver negligently injured an individual while delivering the maps and plat sheets, neither the company nor the driver would be entitled to state governmental immunity, nor would WisDOT be responsible for the crash. The printing company would be an independent contractor and not a servant and wouldn’t even be an agent of WisDOT. See Ketmeyer v. Wausau Ins. Co., 191 Wis.2d 723, 736-737 (1995). In general, the conduct of an independent contractor does not expose the government to potential liability for that conduct. A “servant” relationship exists when the contract is one where the dominant factor is the right to control such factors as the place of work, time of employment, method of payment, supplies and equipment, and the right to discharge employees.

What this all means generally is that WisDOT cannot be held responsible for the physical negligence of an independent contractor; but might be responsible for the negligence of an agent over whom it has enough control to make that person or agent a “servant” or the close equivalent of an employee. See Wis. J.I-Civil 4000, Agency; and Wis. J.I-Civil 4050, Independent Contractor; see also Arands v. City of Franklin, 83 Wis. 2d 40, 43-44, 264 N.W.2d 579, 581 (1978).

What WisDOT should attempt to accomplish in its Cooperative Acquisition Agreements with any eligible public utility is a convenient way to jointly exercise any power or duty required or authorized by law relating to the acquisition, development or maintenance of rights-of-way to be used jointly by WisDOT and the public utility. This means the agreement needs to establish a sufficient agency relationship to empower a utility to act on WisDOT’s behalf or for WisDOT to act on behalf of the utility without crossing the line and making the utility or its employees or subcontractors “servants” of WisDOT.

**QUESTION 2:** "If so [if utility real estate agents can purchase easements and if necessary use our “quick-take” condemnation process], whose name would the easement have to be in? Can the easement be in the utility’s name, or does it have to be an easement in WisDOT’s name?"

**ANSWER 2:** In WisDOT’s name if the easement is acquired by "quick take" under sec. 32.06, Stats. Otherwise, if acquired by purchase, it could be in either WisDOT or the utility name depending on the specific situation.

(1) The department, acting in the public interest, may contract with a public utility, as defined in s. 196.01 (5), or with a rural electric cooperative, as defined in s. 32.02 (10), for the receipt or furnishing of services, or for the joint exercise of any power or duty required or authorized by law, relating to the acquisition, development or maintenance of rights-of-way to be used jointly by the department and a public utility or rural electric cooperative association. If parties to a contract under this section have varying powers or duties under the law, each may act under the contract to the extent of its lawful powers and duties. This section shall be interpreted liberally in favor of cooperative action between the department and a public utility or rural electric cooperative association.

An “agent” in a legal sense is a person who acts in your name. The agent is your representative and acts for, in the place of, and instead of, you. A consequence of the relationship that whatever an agent does in the lawful prosecution of the transaction entrusted to the agent is your act. Another characteristic of the agency relationship is that the agent has the power to bring about or alter business and legal relationships between you and third persons. Agents and independent contractors are not mutually exclusive categories; both can and do act on your behalf. The critical distinction is the degree of control you exercise. An independent contractor is one that contracts with another to do something, but is not controlled by the other nor subject to the other's right to control with respect to physical conduct in the performance of the undertaking. What this means generally is that you cannot be held responsible for the physical negligence of an independent contractor; you might be responsible for the negligence of an agent over whom you have enough control to make that person the close equivalent of an
employee or servant. See Wis J I–Civil 4000, Agency; and Wis J I–Civil 4050, Independent Contractor; see also 

The WISDOT/utility agreement should state the utility is acting as an independent contractor on behalf of 
WISDOT, and pursuant to that contract the utility may purchase easements and use our "quick-take" 
condemnation process for the benefit of WISDOT. In this situation, the utility will be acting in the same 
manor as an outside consultant who has been contracted to act on our behalf.